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Virginia Wildlife

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COVER: A great tree falls. A tiny spore alights. A fungus grows. Mushrooms spring up, and hasten the decay, until the log returns to enrich the soil from which it came, to nourish the tree that once was its seed and now stands in its place. And life goes on. Our photographer: Leonard E. Foote.

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UNTAXED INHERITANCE

A HALF century ago a strange, hand written will was found in the pocket of an old coat hanging in the Chicago poorhouse after its author, a former patient, had died. *American Forests* magazine suggested recently that this will, duly probated and preserved in the records of Cook County, Illinois, merits more frequent and general reading than it receives. And we agree. Its author once looked upon the things of this world, and saw that they were good; and with simple eloquence he gave expression to the deep sense of gratitude and stewardship by which man is impelled to cherish and preserve all that which can lift human eyes, and hearts, and lives, above the mere struggle of "hungry man in search of food." The document itself is no insignificant part of the estate Charles Lounsberry sought to bequeath.

Although the will has been given sporadic publicity from time to time during the past fifty years, there still are heirs of Charles Lounsberry who have not claimed, and perhaps do not know of, their share in his tax-free estate. For the benefit of those among them who read *Virginia Wildlife*, we too would publish once more this last will and testament. It reads as follows:

"I, Charles Lounsberry, being of sound and disposing mind and memory, do hereby make and publish this my last will and testament, in order, as justly as may be, to distribute my interests in the world among succeeding men.

"That part of my interests which is known in law and recognized in the sheepbound volumes as my property, being inconsiderable and of none account, I make no disposition of in this will. My right to live, being but a life estate, is not at my disposal, but these things excepted, all else in the world I now proceed to devise and bequeath.

"Item: I give to good fathers and mothers, in trust for their children, all good little words of praise and encouragement, and all quaint pet names and endearments; and I charge said parents to use them justly, but generously, as the needs of their children shall require.

"Item: I leave to children inclusively, but only for the term of their childhood, all and every of the flowers of the fields and the blossoms of the woods, with the right to play among them freely according to the customs of the children, warning them at the same time against thistles and thorns. And I devise to children the banks of the brooks and the golden sands beneath the waters thereof, and the odors of the willows that dip therein, and the white clouds that float high over the giant trees.

"And I leave to the children, the long, long days to be merry in, in a thousands ways, and the night and the train of the Milky Way to wonder at, but subject, nevertheless, to the rights hereinafter given to lovers.

"Item: I devise to boys, jointly, all the useful, idle fields and commons where ball may be played, all pleasant waters where one may

(Continued on page 27)

Rifles, Slugs, or Buckshot

I enjoyed Mr. McKenna's article on deer hunting a lot. Some good thinking went into that. It is a fine thing, when the work slacks up in the fall, to get out with your friends for a deer hunt. Some of the finest sport, and fellowship, I ever had has come that way.

I have been going after deer for many years and in various parts of the state. I have had excellent success, so that the boys in the mountains claim that I smell good to a deer. Of course, I have seen many kinds of equipment in use and observed the results obtained with it.

There is no doubt about it—a rifle is the thing where you can use it. It is impossible to get too close, and it will kill as far as one can get good hits. This is far less than most seem to think. Most of the fellows who are supposed to know claim the .30-30 is the least caliber that should be used. I must agree with them. Smaller caliber give too many cripples.

The next best weapon to a rifle is a 12 gauge pump or automatic with slugs. A 16 gauge might qualify, but surely nothing smaller. The states of Maryland and Ohio are very densely populated and relatively flat. Both states have required the use of slugs exclusively for deer hunting for many years. Their accident rate with slugs is far better than ours with buckshot. There is hardly any comparison between the effectiveness of the two loads. It may be true that the special slug guns give better results, but any good single barreled gun with any boring will give excellent results. It should be fitted with a rear sight, however. The range of slugs is approximately one half mile and that of buckshot one third mile. Any gun that will safely fire one of these loads will stand the other without injury, but neither is for antiques.

In the case of buckshot there is a lot of luck involved in getting a good barrel. I have had best success with full choke barrels, but many of them are plenty sour. You never can know until you try a few patterns. Even then you may get better results with some particular size, or even the make of ammunition can make the difference. In some cases I have used oversized buckshot (000 in the 12 gauge and 00 in the 16 gauge) and get good results from otherwise sour barrels. Some say 00 is not so good, but if your gun handles it, it will do all right. You must figure on a high percentage of the load hitting the target for consistent kills, so it is pretty much up to the gun. A lot of the fellows I know are getting the three inch magnum 12 gauge guns for deer. Of course, getting one of the magnums does not guarantee you a good buckshot gun, but if you do get one it really is good. Mine throws by far the best patterns with buckshot I have yet seen. Just a word of caution. It is not at all smart to fire the three inch shells in standard chambers. They will go in a standard chamber and fire. It is not guaranteed to wreck the gun, but it is dangerous.

James R. Boldridge
Disputanta, Virginia

(Continued on page 27)

OUTSTANDING CONSERVATIONIST

DOCTOR Ira N. Gabrielson is one of the most outstanding professionals in the entire field of natural resource management and conservation.

As president of the Wildlife Management Institute, and earlier as director of the U. S. Fish and Wildlife Service, Dr. Gabrielson has had occasion to travel extensively throughout North America and to keep in close touch with conditions and problems affecting the wildlife of the entire continent. His views reflect neither parochialism, nor regional bias, which accounts in large measure for the respect they command and the influence they exert.

Gabrielson became the first director of the U. S. Fish and Wildlife Service in 1940 when that new agency was formed by combining the Biological Survey and the Bureau of Fisheries. He resigned from federal service that same year to accept the presidency of the Wildlife Management Institute.

His experience and knowledge derived from actual observations are reflected in hundreds of published articles, both popular and scientific. He has authored four books and co-authored three.

THE JOB AHEAD

By IRA N. GABRIELSON
President, Wildlife Management Institute
(Extracts from Doctor Gabrielson's address to the 28th North American Wildlife and Natural Resources Conference)

RESISTANCE to change is predictable. Sometimes it is constructive; sometimes it is not.

I am disturbed to find, more and more, parochial attitudes and thinking becoming a serious deterrent to the fitting of natural resources objectives and programs to emerging needs.

Let me give an example. Nationally, a huge groundswell is mounting for outdoor recreation of all kinds. Studies in some states and the conclusions of the Outdoor Recreation Resources Review Commission show that a considerable part of the recreation demand is oriented toward water and fish and wildlife. Some imaginative state recreation programs already are firmed and others are under consideration. Fish and wildlife have considerable part in them. The federal government is striving to get a new outdoor recreation program going, and one of the recommended proposals, *the land conservation fund, could yield financial support to state programs far in excess of foreseeable revenues from license fees.* Fortunately, some administrators are in the vanguard, offering leadership and striving to insure that fish and wildlife get the attention they deserve in any national program that is developed. There are others, unfortunately, who appear to prefer to stand in the wings and grumble and criticize. They apparently see no value, no opportunity, in identifying fishing and hunting with the tremendous national appetite for outdoor recreation.

Seldom, in my experience, have we been offered a major role in a campaign that has so much popular support and so much chance of success. Political, financial, and public support are assured. People are interested in outdoor recreation, and in many states it is the fish and wildlife department that is in the most favored position to serve them.

The 1962 Food and Agriculture Act offers opportunities to landowners and to state agencies for the development of recreation facilities and fish and wildlife habitat on private lands. All sorts of low-interest, long-term loans and incentive, cost sharing, and practices adjustment payments are being offered. For the first time, recreation of all kinds is being viewed as a justified expenditure of public funds in agriculture programs. Further opportunities are offered under the small watershed program, and rural renewal and area redevelopment.

State conservation agencies should study these programs carefully, and consult with agriculture groups to see if there is a role for them in increasing public understanding of the available financial and technical assistance. The Department of Agriculture has estimated that 50 million fewer acres will be needed in crop production in coming years. How much of this land is devoted to recreation and fish and wildlife depends on how well the private landowners are acquainted with the benefits that can be derived.

More Research Needed

Despite all the national furor, there still is little effective information to guide the field use of highly toxic chemicals in agriculture, forestry, and other pest control programs. The rapid appearance of new products on the market continues to dwarf all hope for improved understanding. Essential research doesn't lead, it barely follows.

We must learn more about the effects of those poisons on food chain organisms, and on the pathology and reproduction of all animals. Greater effort is needed to test and to identify new chemicals. The whole testing program of the Bureau of Sport Fisheries and Wildlife should be expanded. Candidate chemicals must be tested and evaluated well before the manufacturers commit large expenditures for development. It is the press of that financial investment that is forcing some products on the market.

I have serious question about the prevailing philosophy that restricts wildlife research activities of the Bureau largely to migratory game forms. There are plenty of avenues of research on both non-game migrants and resident species that the Bureau can perform that would benefit both state and federal programs. Wildlife research work of necessity is becoming increasingly complex and the

knowledge that is required is beyond the abilities of the wildlife biologists in many respects. Chemists, physiologists, biostatisticians and others are needed, and their services are expensive to secure. The reservations about federal research appear more imaginery than real. The Bureau at least has some of these technicians.

The need for accelerating bird research is obvious. The Bureau is unable to provide the information about satisfactory methods for controlling any number of pest species or of helping valuable ones.

Waterfowl Problems

Waterfowl remain a continuing problem, but the acute need to overcome habitat destruction should not preclude the search for information about improving the usage of existing habitat as well as exploring methods of getting waterfowl production from stock and farm ponds. Congress must devise an acceptable refuge revenue sharing formula that will get county governments to support, rather than block, the wetlands acquisition programs.

An old problem, but with a new stumbling block, involves the Department of the Interior and the Bureau of the Budget, the President's fiscal monitor. The Budget Bureau is maintaining that duck stamp funds should be used to pay for lands acquired at federal impoundments for fish and wildlife purposes. Secretary Udall contends, and I think rightly, that the Budget Bureau is not correct.

The Budget Bureau's stand, if sustained, would make mockery of the $105 million wetlands acquisition loan that is to be repaid from future duck stamp sales. It would mean again that a small element of the public would be saddled with paying the bill for all. It contradicts the land conservation fund proposal, approved by the President, and now in Congress, that provides that part of the fund's receipts would be deposited in the Treasury to help offset the costs of acquisition of lands for recreation and fish and wildlife enhancement at federal and federally assisted water projects.

National Land Reserve

Paralleling our obligation to build is an obligation to prevent destruction. Sometimes they go hand in hand, as in the case of the Bureau of Land Management, to build by preventing destruction. Here, we are confronted by adversaries of old—those few people who hold permits and licenses to graze livestock on the national land reserve and who want to freeze their already considerable public lands privileges into permanent personal rights. They want a free hand in putting public land to private use, on their own terms, at the least possible expense and with the least interference.

The politically minded grazing permittees are a formidable and patient opponent. They are going to put their brand on much of the 180 million acres of public lands in the West unless the millions of people that live in this country begin to insist in a louder voice that their interests be given some consideration.

There is lots of talk about new frontiers these days. One of the greatest resources opportunities for a new frontier is in the Bureau of Land Management, which administers 180 million acres in the West excluding Alaska. It is shackled by outmoded concepts and dusty laws. Few people, including members of Congress, realize how valuable the national land reserve really is. Few realize that the BLM is about the best money maker the federal government has. Over the years, BLM lands have returned more than $7 for every $1 appropriated to administer them. It returned $1 billion to the federal treasury in 10 years.

Despite this excellent record, some people are saying that the nation really can't afford the national land reserve, that the BLM shouldn't hire more qualified resource specialists, that a range technician who has a responsibility for more than two million acres shouldn't have a two-way radio in his car, and that range rehabilitation, erosion control, reforestation and fire suppression are unnecessary because the BLM administers only useless desert, something that no one wants. Nothing could be further from the truth.

Take the question of outdoor recreation that I mentioned earlier. Some of the country's outstanding outdoor slums are on the national land reserve. The reason is simple and the blame is clear. No administration and no Congress ever has faced up to the fact that the BLM should be running a recreation program. In the past two years the BLM has not had $1 to do anything for outdoor recreation. It can't build picnic tables, fireplaces, sanitary facilities, or water taps. It can't even pick up the debris and the litter at the places that are getting heavy recreation use—and many are.

Conditions are now developing for a face-to-face encounter over the national land reserve, and I cannot urge too strongly that conservationists keep themselves up-to-date on all the developments. Change is in the wind, and whether it blows good or bad may be up to you. The stakes are important, and the situation is tense.

A New Threat

No stranger to most of you is the continued threat to fish and wildlife from various suggested dams and impoundments. There is a new proposal now for a project that dwarfs all previous projects in the unprecedented magnitude of fish and wildlife resources and habitat that would be destroyed.

It is the proposed Rampart Dam on the Yukon River in central Alaska. Get acquainted with this proposal and you will find beneath its glossy surface a massive and irreparable threat to fish and wildlife.

The 500-foot dam would block sizable upstream migration of salmon in the Yukon. The Rampart impoundment would cover 10,000 *square miles* of the Yukon Flats that produce on the average of 1½ million ducks and geese a year. *More ducks are produced there than are bagged in most flyways.* They represent millions of man-days of recreation potential in *all* states, because Yukon Flats waterfowl are bagged in *all* flyways, from the Pacific to the Atlantic.

Rampart Dam is synonymous with resources destruction. A very determined effort is being made to rush its authorization through Congress, and conservationists everywhere had better look into the proposal and learn the facts that are involved.

* * * * *

These are some of the things that must be done. It isn't spectacular work, and the wages aren't high, but the rewards are great. It is the plodding, studious, sincere work that involves increasing understanding and overcoming opposition. It is the intensive kind of work that will insure that resources will be available for the future enjoyment and benefit of the people. It is our job that lies ahead.

OVERSHOOTING WILL HURT

Photo by Leonard Lee Rue III

DOVE hunters have long realized that continuous shooting over a single field is not advisable and a two-year study indicates just how much difference there is between controlled and uncontrolled shooting, not only in the kill but in the crippling loss.

The study was carried on during the 1958-59 and 1959-60 seasons by the Clemson Wildlife Research Project, which is sponsored jointly as a Federal Aid Project by Clemson College and the South Carolina Wildlife Resources Department. It involved two isolated fields, each containing approximately 300 acres and used by the Farms Department for the production of corn, corn silage, milo grain and soybeans. In addition to these crops, the Project planted 15 to 20 acres of brown-top millet in each area. These plantings were made in strips throughout both acres by using a cyclone seeder to scatter millet just ahead of a four-row cultivator that was used during the last plowing of the farm crop.

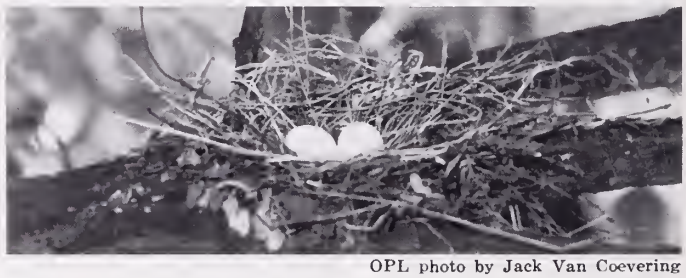
The millet produced well in all crops with the exception of soybeans, where excessive shading limited its growth. However, it was found to be more utilized by doves when growing in corn that was later cut for silage. This operation, of course, left the area more open for feeding. The doves also obtained food from the various farm crops and weeds.

On the uncontrolled field there were no restrictions while the controlled field was shot every seventh day. A careful count was kept on each and it showed that the kill per gun hour over the field shot only once a week approximately doubled that from the field shot every day during the open season. A comparison of the crippling loss during the study showed that it was four times as high on the uncontrolled area as compared with the controlled shoots. (See Table 1.)

Even more astonishing were the comparisons when the kill per gun hour and crippling loss data secured from both areas on opening dates were eliminated. With opening date data eliminated, the kill per gun hour on controlled shoots was approximately three and one-half times that on uncontrolled shoots, while the crippling loss on the uncontrolled shoots was over seven times that recorded for the controlled shoots. (See Table 2.)

Shooting success and crippling loss from both areas on all opening dates were approximately the same. (There were about the same number of doves in each field.) This could be expected since prior to opening dates there had been no shooting to molest the feeding doves. It was the continuous shooting following the opening dates on the uncontrolled area that apparently made the difference, the dove populations dropping and the individual birds flying higher. Consequently, this area had less total kill, less kill per gun hour and a much higher crippling loss.

In examining the information secured from controlled shoots only, it is readily apparent that the elimination of the opening date data had little effect on either the kill per gun hour (2.47 vs. 2.50) or the crippling loss per dove bagged (.106 vs. .108). This suggests that doves can be shot on the same area at weekly intervals without drastically lowering the area population or causing the doves to fly too high for effective shooting.



OPL photo by Jack Van Coevering

Doves lay small egg clutches in flimsy nests, but because they nest several times each season they can withstand a heavy fall harvest.

Whether or not doves can be shot at time lengths of less than seven days is not known, and is something that would have to be determined locally. It would depend a great deal on the population of doves in the general area and the availability and dispersion of good feeding areas.

Several authorities on mourning doves claim that, barring outbreaks of disease, etc., they could be harvested in greater numbers. Certainly it will help the shooter if he can pick up more of the doves that he shoots down. Therefore, let's make our dove shooting a little more enjoyable by not shooting or permitting a given area to be shot over every day of the season.

Commission photo by Kesteloo

A local area dove population cannot support this kind of hunting pressure every day. The birds move elsewhere, or stay beyond clean killing range of the guns.

DOVE HUNTING

By DR. LLOYD G. WEBB
Project Leader
Clemson Wildlife Management
Research Project

Commission photo by Kesteloo

Overshooting results in long shots at high flying birds, reduced kills, and increased crippling loss.

When not overshot, doves fly lower, can be taken at optimum ranges. More birds are bagged per gun per hour, and fewer are crippled.

TABLE 1—Dove Kill Records from Controlled Dove Shooting as Compared to Uncontrolled Dove Shooting During Two Hunting Seasons (1958-59 and 1959-60), INCLUDING DATA TAKEN ON OPENING DATES

Kind of Dove Shoots	*Number of Hunters Sampled*	*Number of Gun Hours*	*Number of Doves Killed*	*Number of Doves Crippled*	*Average No. Doves Killed Per Gun Hour of Shooting*	*Average No. Doves Wounded for each Dove Kill*
Controlled Shooting	161	364	901	96	2.47	.106
Non-Controlled Shooting	63	111	142	45	1.28	.405

TABLE 2—Dove Kill Records from Controlled Dove Shooting as Compared to Uncontrolled Dove Shooting During Two Hunting Seasons (1958-59 and 1959-60), NOT INCLUDING DATA TAKEN ON OPENING DATES

Kind of Dove Shoots	*Number of Hunters Sampled*	*Number of Gun Hours*	*Number of Doves Killed*	*Number of Doves Crippled*	*Average No. Doves Killed Per Gun Hour of Shooting*	*Average No. Doves Wounded for each Dove Kill*
Controlled Shooting	103	232	580	63	2.50	.108
Non-Controlled Shooting	43	70	50	39	.71	.780

Reprinted from *South Carolina Wildlife*, courtesy South Carolina Wildlife Resources Department.

Fifth in a series of articles on some of the favorite angling hot spots in Virginia.

Chickahominy Lake

By MAX AILOR
Richmond, Virginia

THERE was a note of sarcasm in the instructions. The challenge required that it be disregarded. The mind prepared itself to trigger a complicated nerve system that was to manipulate the most accurate cast of my life.

"If you could put a cast into the gut of that old cypress tree, I believe we could get ourselves a nice bass," was Ed Allen's challenge.

Allen has spent his 40 years growing up on the Chickahominy river. As a 16-year-old his first paying job was to assist construction workers in 1941-43 in the building of a small dam that was to back up a section of the Chickahominy swamps as a water reservoir at Walkers to serve as a reserve for the city of Newport News.

He didn't realize it at the time but Allen was shaping the future for himself and assisting in the creation of what probably is the most unusual fishing hole in the United States. The shallow dam is so designed that it protrudes only six to 12 inches above the high water mark of the tides which direct the fishing successes of anglers below the dam. The dam was supposed to be just high enough to protect the lake from the brackish waters which travel from the Chesapeake Bay up the James river and into the Chickahominy river.

The cypress trees stood in the swamps before the dam was constructed. They harbored fish in those early days and they have become even more important to anglers. They've proved important to Allen who has one of the largest boat liveries on the prized lake and who fishes whenever a slack in business permits the opportunity. He's not a serious fisherman, preferring to angle with persons with whom he knows he can joke.

If was a stroke of good fortune that I arrived during a slack period and that Allen was able to go fishing with me for a few hours on an early summer day four years ago. The cypress with the gut pointed out by Allen was to become my favorite fishing hole.

It was a difficult cast. I was using an Ambassadeur 5000 strung with 15-pound test monofilament line on a balanced baitcasting rig. We were about 35 feet from the trees which isn't a difficult casting distance with most plugs. The bait, however, was a frog green Whopper Stopper Stumper, a top water popping plug with a double rigging of feathering, plastic skirts. It lends itself to wind resistance.

I didn't know it at the time but the cypress had rotted and its shell was a dark cloak sheltering a space of green water about three feet in diameter. Access to the cove was to cast through a passage no more than six inches wide and 12 inches above the surface of the water.

Such challenges make fresh water angling the greatest sport in the world. To make such a difficult cast builds a man's confidence and he is to be satisfied even if the entire lake doesn't own a single fish.

When the bait hummed through the hole to land somewhere in the dark recess of the tree, there was no time to turn to Allen with a John Barrymore bow and the grin of a youngster who just discovered where his mother hid the cookie jar.

There was a resounding explosion. A bass resented the intrusion. The hollow tree echoed and amplified the attack in a way that would shame Russia's megaton bombs.

Allen lost control of his oar. The angler must have set the hook through reflexes. The bass wasn't a thinking fish, for his reflexes must have told him to get the heck out of the hole. He charged and tried flying to avoid collision with a cypress knee. Water sprayed the boat and caused angler and oarsman to return to sane reactions.

Commission photo by Shomon

When herring, shad, striped bass and white perch run in the Chickahominy, anglers gather at the dam.

The bass weighed only five pounds, nine ounces. It was horse enough to pull the boat into the cypress knees. Only a sturdy, new line saved him in the tangles of the knees.

I never go to the Chickahominy Lake unless I'm prepared with three rods—fly rod, baitcasting, and spinning gear. Such an armload isn't necessary, but the lake has so much to offer in the way of fish and so many types of fishing that a person's enjoyment is registered in a ratio as to the equipment he carries.

There are such bruising largemouth bass to be found in entanglements that the light tackle enthusiast may be lost without proper gear. There are grass beds and lily pads abounding with perch, small bass, bluegills, rock bass, pike and even striped bass, which afford supreme flyrod angling. Vast areas of open waters which have sandbars, stumps and old boat dumps afford ideal spin fishing.

There are an estimated 1800 acres of surface waters in

Chickahominy Lake. Fully half of the area is swampland protected by thick growth of grasses, trees, and stumps which served as nursery and warehouse assuring a constant supply of fish for the 900 acres of open waters.

The Chickahominy Lake probably is the only body of water in the country where 90 percent of the fishermen are there to catch "brim." The lake abounds with large bream, a grouping used by the anglers to include white perch, rock bass, crappie, bluegills, longeared perch and freckles, red bellies or pumpkinseeds.

The vast majority of the "brim" taken are keepers—that is, they are considered large enough for the fry pan. The fame of the lake has spread into neighboring states. There are as many anglers from North Carolina and Maryland as there are Virginians at the lake on a week end.

"I caught only four bass today," said Marvin Kelly, a North Carolina angler who had his cooler chuck-full of crappie, bluegills and red eyes.

"I thought you said you were using a flyrod for bream," said a bystander nibbling on a few French fried potatoes at the restaurant and sports store run by Louise Allen at Camp No. 1.

"I was. I always catch a few nice bass on bream poppers.

Commission photo by Kesteloo

Cypress trees standing in the shallows and the entanglements along the shore lines harbor lunker bass. A lot of anglers concentrate on the lake's large panfish, but still end up with bass on their stringers.

In fact, I usually get my limit. I guess the east wind didn't help. The perch were hitting real good but the bass were slow."

The lake isn't hard to learn. The greatest amount of fishing is done within a three or four square mile area. There are some changes of technique with the changes of the season. But, fish are always there to be hooked and it is seldom that even the novice angler doesn't get a few finfishes to go on his stringer.

The characteristics of the lake and the change of seasons have as much to do with the change of techniques as does the weather. The shallow dam does not serve its full purpose. About twice each month there are tides which cause the Chickahominy river to rise above the dam, flushing salt water into the lake. With this rise come an abundance of such salt water fish as herring, shad, striped bass, white perch and blackback minnows. During the spawning seasons many of the Chesapeake Bay fish travel the tidal streams to spawn. They pass into the lake at the dam's fish ladder.

The combinations of the salt water and salt water species of fish contribute greatly to the abundance and size of fish within the reservoir, and stir a change of feeding habits among the lake's inhabitants.

Striped bass and white perch make two and sometimes three migratory runs up the Chickahominy River. There is a period in the early spring when the stripers chase or follow blackback minnows as the lesser fish make their spawning run. Anglers gather at the dam and use jigs, spoons and blackback minnows to fish for the popular salt water sports fish. At least one weighing about 29 pounds has been caught. That one is mounted and hangs on the wall at Camp No. 1.

The second run of stripers is their own spawning run in May. The third comes in the fall of the year as striped bass prowl for food before returning to the James river and the Chesapeake Bay to find deep, warm holes for the winter. Plugs and spoons are effective during these runs.

As the season changes to summer the lake becomes alive with frogs. There is an abundance of wood ducks in the area. The young ducks as they are pushed from their nests and the venturesome frogs splash the water among the trees and lily pads, attracting hungry fish.

This season of the year is most effective for top water baits. The Stumper, Hula Poppers, Jitterbugs and darters are deadly as bass mistake the plug for a foolish frog or

Photo by the author

Chickahominy Lake is a body of water that can be approached with confidence that there are fish to be caught, and catches like this one prove it. Even the novice angler usually gets a few nice ones.

duckling. But, they are most effective when tossed into the entanglements. This, of course, requires a strong line that fish of lunker sizes may be horsed from the entanglements to be played in open waters. More huge fish escape with broken lines than are captured. But there probably are more black bass of the eight- to ten-pound class registered at the Chickahominy lake in the spring and fall of each year than in all other Virginia waters combined.

The warm months which drift into September and October do not mean the end of prime top water fishing. The best of the bass fishing is in the early morning hours before sunrise and in the late evening after the sun has put to bed.

Big bass move into the shelter of the trees and grasses during the warm hours of the day. But they do sneak into open waters for mid-day snacks. Bream travel in schools in the deep waters and bass seek them out. Trolling of minnows, spinners and deep running broken-back plugs will pay off during the daylight hours.

The young fish which have escaped larger fish to grow and thrive while hiding in the deep weeds and swamps become more vigorous during the fall of the year when the abun-

(Continued on page 22)

NEW LESSONS from the Old World

By CAPT. JACK RANDOLPH
Fort Lee, Virginia

American servicemen learn to judge a roe deer trophy at the Hunters, Instructors & Examiners Course conducted annually in Berchtesgaden, Germany.

WHEN the American serviceman arrives in Germany, one of his first experiences is a ride from the port to his new station on one of the efficient German trains or on a glass-topped bus speeding along the autobahn. At first he'll marvel at the lush green countryside, and if he's a hunter, his hunter's eye will start examining the edge of every forest and hedgerow, searching for game that his experience has taught him should be there.

And his search will be rewarded. He sees the diminutive roe deer in astounding numbers, giant hares that stagger his imagination, plump partridges that remind him in bigger-than-life size of bobwhites back home. A gaudy rooster ringneck pheasant may greet his eyes and, if he is especially lucky, he may see a red fox trotting across a pasture, the sun illuminating his fiery coat giving him a blazing, unreal appearance.

Germany is a hunter's land, and a short glimpse of the countryside is enough to trigger that desire to hunt in all who hold hunting as one of their favorite hobbies.

Once our serviceman arrives at his new duty station and gets settled in his work he begins to look around for things to do. He learned during his orientation that each command has assigned a German Hunting & Fishing Clerk whose duty it is to arrange hunting and fishing opportunities for American servicemen.

At his first opportunity our serviceman looks up his local hunting and fishing office and asks about arranging to hunt. He's quite unprepared for the shock he receives when the clerk says, "Hunting? You want to hunt? Yes, I can arrange for you to hunt. We have fine hunting here. But first you must attend the hunting course."

The soldier, surprised, says, "Hunting course! I've hunted all of my life."

"It makes no difference," the clerk replies. "In Germany the law requires that everyone attend a hunting course and pass a written examination before he may apply for a hunting license."

This is the critical moment. If the would-be hunter is really an ardent nimrod he goes on to learn the details. If he isn't, he usually thanks the clerk for his trouble and looks for other things to do with his free time. But our man is a hunter. He's bound and determined to see this thing through to get a chance at the game he sees daily frolicking in the fields along the roads.

The Hunting & Fishing Clerk goes on to explain that the hunting course consists of 25 lessons covering everything from German hunting customs to wildlife management. Every game animal is covered to include its description, food, habitat, breeding, trophy development, characteristics of age, detecting poorer or diseased specimens, and various methods of hunting each animal. The graduate of this course knows his game and is fully capable of shooting selectively. The wildlife management techniques peculiar to each species are touched upon and when the hunter takes the field he has both knowledge of and respect for his quarry.

Firearm safety is another part of the course. Some classes go so far as to teach how to shoot in addition to safety practices. Weapons themselves are discussed and each student learns what is behind those mystic numbers stamped on rifle cartridges and gun barrels. The student is taught the capabilities and limitations of common rifles and shotguns, and he's also instructed as to where to place the bullet to deliver the swiftest, most merciful kill.

Field dressing of game is part of the course and hunting methods, particularly the organized drive hunts, are covered thoroughly. Customs and traditions of the hunt are emphasized. Courtesy and good fellowship are stressed and many other interesting subjects are dealt with.

The Hunting & Fishing Clerk goes on to explain that the course is generally taught by experienced American servicemen-sportsmen who have attended the Hunter Instructor and Examiners Course taught annually by the Association of American Rod & Gun Clubs in Europe.

The instructor is often assisted by the Hunting & Fishing Clerk. The course is taught in the evening, after duty hours. Usually it is held in the local rod and gun club. An Army manual, *Guide to Hunting in Germany*, and a specially prepared set of colored slides assist the instructor in his presentation. The instruction is usually very well presented in a comfortable informal atmosphere.

Our serviceman is far from convinced, but his desire to hunt overcomes his natural reluctance to attend school to "learn to hunt all over again." He signs up for the course. "It doesn't cost anything. What can I lose?"

From the first evening his experience is one of discovery. He learns things he never suspected and catches himself saying such things as, "Gee, I didn't know that you couldn't tell a deer's age by his antlers!" or "I thought all animals mated in the spring." Every night offers new facts answering "why's' that he had carried in the back of his mind for years. He begins to learn things about game that give reason to some of the laws back home, many of which never made sense to him. He learns much that contradicts beliefs he had held since childhood.

For example, he was brought up to believe that doe deer should never be shot and that the real sportsman always hunted for the deer with the biggest rack. But his instructor says that most German game keepers hold that the ratio between male and female deer should be very close, some going so far as to maintain that a 1 to 1 ratio is proper. Further, he is introduced to the concept of selective shooting where the better animals are protected until they reach their prime and the poorer specimens are harvested before they can reproduce more game of poorer quality.

Many of these new ideas are not workable at home, but they start his mind into motion and he finds himself eagerly awaiting the next class. He may even begin to look elsewhere for more information on the subject and often is surprised at the treasure trove of information to be found on the shelves of the post library.

The course ends all too soon. The final written examination, he discovers, is a snap. The course was so interesting that he absorbed every word and came through with an excellent knowledge of the subject.

After passing the exam he was given a certificate of completion of the course, the first step towards his hunting license. The second was easier. This was the matter of insurance. German law requires that each hunter carry liability insurance against personal damage in the amount of nearly $40,000 and in the amount of about $4,000 against property damage. This insurance cost him about $4 for the season.

Then there's the license. Armed with his certificate of successful completion of the hunting course and his insurance policy and, of course, the $11 fee, our soldier purchases his license. Of course he may hunt only on those hunts arranged by the Hunting & Fishing Clerk or upon invitation of an owner of hunting rights, but he is now qualified to take the field within these limits. And by the way, the license does not entitle him to any game. That which he kills belongs to the owner of the hunting rights. If he desires to take home game he may purchase it at the going market price.

Armed Forces Rec. Center, Berchtesgaden, photo by Yoder

Display of German game trophies at the annual Convention of Association of American Rod & Gun Clubs in Europe.

Yet, most Americans feel that they get their money's worth. The hunting itself is the big thing and this they get plenty of. The hunting year opens April 1st and runs through the following March. Nearly every month is open season for some species of game. And what shooting! A bag of 85 pheasants and as many hare in a single day by a party of a dozen guns is not unusual. A hare drive hunt accounts for over a hundred of the giant bunnies in a day. Hungarian partridge shooting is a bird shooter's dream. Our young soldier soon finds that the time and effort spent in obtaining a license was well worthwhile.

Normally most hunts are arranged by the Hunting & Fishing Clerk. These clerks, incidentally, are without exception the finest group of hard-working sportsmen and sportswomen I have had the pleasure to meet. Theirs is

(Continued next page)

often a thankless job but year after year they successfully arrange hundreds, perhaps thousands, of hunts for American hunters on state-owned and private lands.

It is a tribute to the German hunting course system, the common sportsmanship of both German and American hunters, and the generosity of the German lease holders that our servicemen have been invited year after year to hunt on a great many private German lands. Our new hunter, and many thousands like him, is impressed with the German system. While he knows that many of the German concepts, however realistic, are not workable in the public hunting atmosphere at home, he has learned some things that may be of value.

In retrospect he is the most impressed by the hunting course. Its value he now appreciates and he wonders why we don't offer similar instruction here at home? He remembers his first hunts, when he was a novice carefully watching others to learn the right thing to do. He thinks of the awful embarrassment of that day when he shot a meadow lark, thinking it was a quail. Then there was that fella last year at home who paid a heavy fine because he couldn't tell the difference between a scaup and a redhead. He remembers those all-too-many times when duck hunters in nearby blinds didn't know the range of their own guns and spoiled the day for everyone by firing at birds that were too high. And then there was that awful day when one of his school mates was carried from the woods dead, killed by another boy who "thought he was a deer."

"It's too bad," he thought, "that most of life's lessons must be learned by the trial and error method. We should take advantage of every break we can get."

Anyone who has taken the hunting course is usually an advocate of the system. But our young friend soon found out that his buddies took a dim view of being taught how to hunt. Their attitude was the same as his before he took the course.

"What can they teach me when I've hunted all of my life?" This is the typical reaction to the hunting course system.

The soldiers are examining a fine auerhahn *(capercailzie)* at the convention trophy show.

It has been relatively easy to "sell" straight firearm safety classes. A hunting accident makes the headlines and impact of a wounded or dead hunter hits the public where it hurts. The results of a hunting course would not be so dramatic but would be equally worthwhile. The need for this instruction exists.

In my view the primary benefit of such a system would be to create a new group of educated sportsmen—men trained in the basic concepts of sound wildlife management who could better recognize and encourage the furtherance of sound wildlife management in their communities. These would by no means be trained biologists but they would at least be able to recognize the "why" of things.

There are many other benefits to be received. Today's average hunter spends but few days afield. Our seasons are short and he is not as adept at recognizing game as our grandfathers were. Our waterfowl shooting is becoming very tricky, and a man must know his birds to obey the law. Many hunters have trouble telling the difference between a tom and hen turkey.

Fortunately, Virginia is not among the states where deer herds have been placed in real jeopardy by public sentiment against killing doe deer, but there are states where the game managers cannot improve the quality of large, undernourished herds of deer because the public will not endorse any doe deer kill. This is a prime example of what an uneducated public can do to hurt our wildlife resources.

It used to be that the common remedy to all game shortages was to call for larger and better stocking programs. It has long been proven that in most situations stocking can do more harm than good. Usually it is habitat that needs the replenishment, not the game. Nature does a fine job of stocking if given an assist. But even this tried and proven concept has not reached the average hunter and in some areas dollars are wasted where with but half the monetary outlay the hunting could be improved with a few feed plots.

A hunting course will make better hunters. It'll teach our youngsters lessons it has taken us years to learn. They'll learn how to track game, where to hunt, how to hunt it, and how to dress it after it has been bagged. (Just for the heck of it, how many different ways have you seen deer dressed?) They'll also learn to identify game on the hoof or on the fly and won't become members of the group that shoots first and identifies later. Through all this we'll have even better and safer hunters.

And finally, we all can see our open hunting lands decreasing every season. We must admit that there are among us some men with guns, recognized as hunters, who conduct themselves in such a manner that more and more lands are closed to those of us who love our sport. The landowner cannot be blamed. He is only protecting himself. I've heard arguments that higher fees would eliminate this problem but then, to me, hunting would no longer be public. I maintain that the hunting course would do the trick much better and with more benefit to all.

I think my young friend said it well: "They say that every year more hunters take the field, and open hunting areas become fewer and fewer. Maybe if we were required to take a hunting course we could learn to hunt better together and in this way stretch our open lands a bit."

I wonder if the time will ever come when we will recognize the value of such a system. There are many who are exploring its virtues What do you think about it?

VIRGINIA WILDLIFE ☆ ☆ ☆ ☆

CONSERVATIONGRAM

Commission Activities and Late Wildlife News . . . At A Glance

279 GOBBLERS BAGGED IN SPRING SEASON. Incomplete returns from 38 of the 43 Virginia counties which were open for spring gobbler hunting show that hunters bagged 279 of the big birds. Nottoway County ranked at the top of the list with a take of 46 gobblers followed closely by Chesterfield with 33. Game Commission officials attribute some of this exceptional success to the larger number of gobbler hunting devotees in these two counties whose residents got a chance to sample this type of hunting last year. At least 35 gobblers were bagged in the 10 Southwest Virginia counties opened for the first time in recent years.

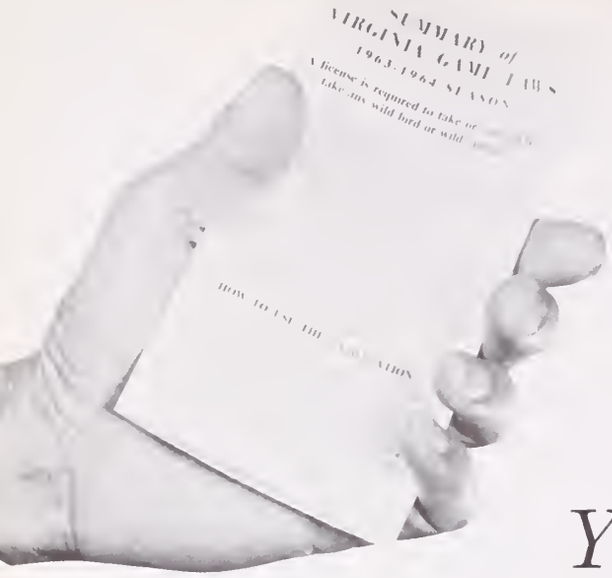
Consistent with previous experimental spring gobbler seasons, hunters reported seeing less than 20 hens per 100 mornings in the field. Based on 131 voluntary questionnaires returned from 31 counties, about 12% of the early morning expeditions were successful. The average turkey hunter heard two gobblers and one out of two saw one. The average devotee of the sport spent about three mornings in the field during the five day season which lasted through 10 a.m. each day.

Based on the dates of reported kills, hunter pressure appeared to be heaviest on Friday and Saturday and lightest on Tuesday, the final day of the season. Thirteen of the birds were reported killed with rifles and the remainder were taken with shotguns. Nearly all of the successful hunters were residents.

APW FUNDS APPROVED FOR VIRGINIA WILDLIFE PROJECTS. Two wildlife development projects expected to cost $130,000, half of which will come from the new Accelerated Public Works Program funds, will begin soon under the supervision of the Commission of Game and Inland Fisheries, according to Executive Director Chester F. Phelps. The projects, which will provide over 16 man-years of local employment, include improvements on the Cumberland State Forest in Cumberland County and the construction of dikes and water control structures on the Commission-owned Saxis Waterfowl Area in Accomack County. These are two of the 16 Virginia counties eligible for Accelerated Public Works aid due to their record of chronic unemployment. Thus far, $119,410 of the APW funds have been authorized for wildlife development in Virginia, about half of which will go for these two projects when matched equally with Game Commission money.

Development on Saxis Marsh will include the construction of two impoundments for waterfowl which will cover approximately 800 acres. Water levels will be controlled by pumping to encourage natural waterfowl food. The estimated project cost is $70,000 and it will provide 7.9 man-years of local employment. The new ponds will be used for additional public waterfowl shooting territory.

Extensive developments planned for the 15,105 acre Cumberland State Forest, administered by the Virginia Division of Forestry and managed cooperatively by the Division and the Game Commission as a public hunting and fishing area, include the construction of an equipment shed, two swinging foot bridges, 15 miles of access road including bridges, four parking areas and one boat ramp. Six miles of the Willis River will be improved for float fishing and three small lakes totaling 18 acres will be constructed on the Forest. About 50 acres of forest land will be cleared by the work crews to improve the habitat for wildlife. Both hunters and fishermen will benefit from the improvements estimated to cost $70,000 and employ 8.7 man-years of local labor.



Your Invitation to enjoy Upland Hunting in Virginia

By HARRY L. GILLAM
Information Officer

WHEN it comes to hunting variety and opportunity, the Old Dominion doesn't have to take a back seat to anyone. From black bear and whitetailed deer on the big game end of the scale down to quail and squirrels on the small game end, Virginia's lineup of legal game species is long enough to be envied by many of our 50 states. The nearly two million acres of federal, state and corporation owned lands open to public hunting in Virginia are unique among the heavily populated eastern states. "With all this potential, why louse it up with a book full of regulations that have to be changed every year?" some critics ask.

In spite of the opinions of cranks, crackpots and even many conscientious sportsmen, hunting regulations are adopted only after careful study and due deliberation by Virginia's 10-man Commission of Game and Inland Fisheries. Conditions change from year to year. One species thrives when another is in trouble. Turkey flocks increase where a deer herd tends to decline, while elsewhere deer hold their own and turkey nesting is a dismal failure. Hunting regulations are drafted to accomplish two main purposes: to restrict the total take of game each year to the surplus available for harvest; and to regulate the harvest by hunters so that all may get the maximum enjoyment from their sport. The changes in this year's seasons and regulations illustrate both of these purposes.

A reduction in the number of turkey hunting days, both east and west of the Blue Ridge, was one of the most significant changes this year. Biologists reported that two successive poor nesting seasons had placed the turkeys over much of the state in a precarious position where further liberal harvests could endanger the brood stock. Since hen turkeys, the producers of next year's turkey crop, make up 50% of the fall kill, the number of fall turkey hunting days was reduced. Because many of the fall-killed turkeys are taken incidental to deer hunting, the turkey season in the

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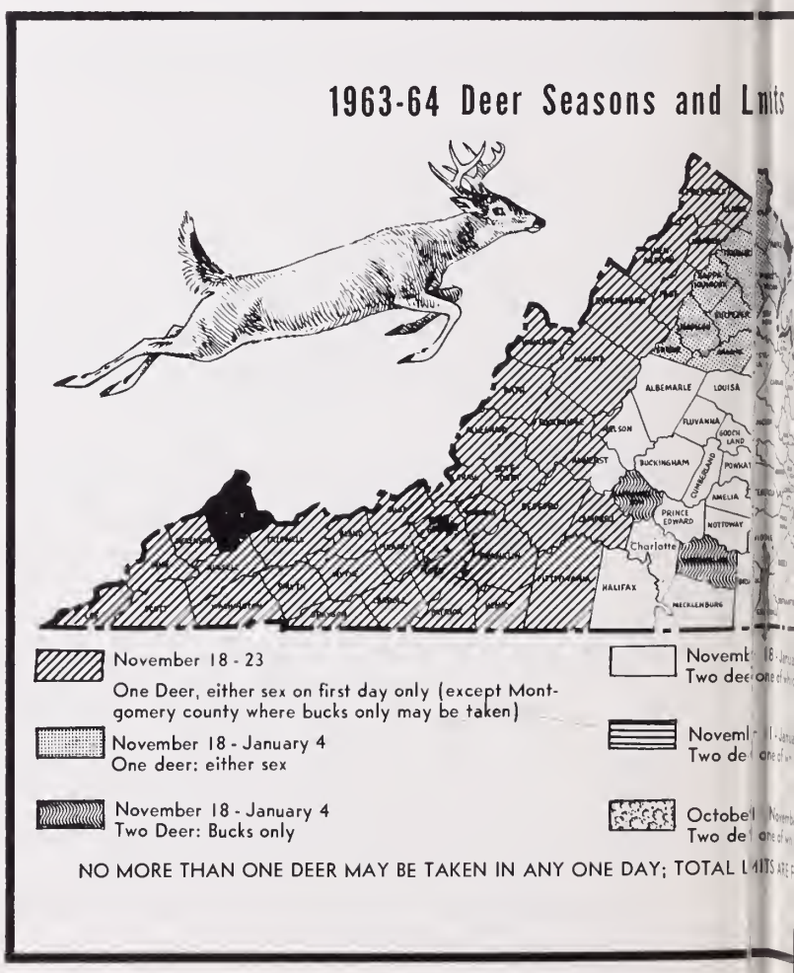
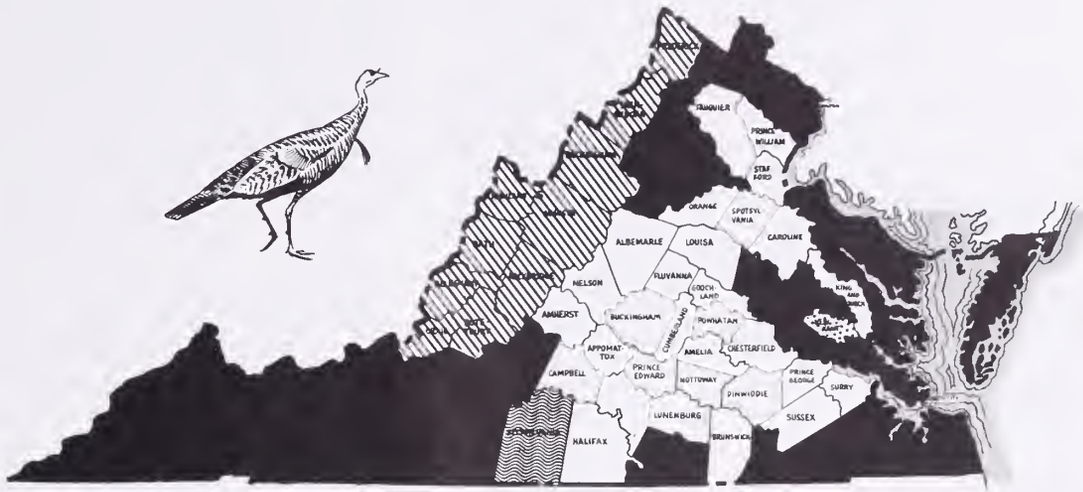


1963-64 Fall Turkey Seasons and Limits



	November 18 - December 14	Two of either sex per license year
	December 16 - January 15	Two of either sex per license year
	November 18 - January 31	Two gobblers per license year
	December 16 - January 15	One gobbler per license year
	CLOSED	

NO MORE THAN ONE TURKEY MAY BE TAKEN IN ANY ONE DAY.

LEGAL WEAPONS

SHOTGUNS no larger than 10 gauge which will hold no more than three shells, the magazine of which has been cut off or plugged with a one-piece metal or wooden filler incapable of removal through the loading end, may be used to hunt wild birds and animals. There are no restrictions on shot sizes in general or for any particular species except that slugs may not be used in the Counties of *Goochland, King William, Louisa, Northumberland, Prince George, Prince William* and *Richmond.*

RIFLES may be used for taking all game species except migratory birds except as prohibited below. Rifles used for hunting deer and bear must be .23 calibre or larger. No rifle larger than .22 calibre may be used for hunting in the Counties of *Appomattox, Buckingham, Caroline, Charles City, Cumberland, Goochland, Halifax, King and Queen, King George* (except that in *King George County* larger rifles may be used to take woodchucks during the general closed season), *Lancaster, Louisa, Northumberland,* and *Prince William.*

Use of a rifle for hunting deer is prohibited in all of the above counties and in the Counties of *Chesterfield, Essex, Hanover, Isle of Wight, King William, New Kent, Prince George, Richmond, Southampton, Surry* and *Sussex.* The use of a rifle for hunting deer and bear is also prohibited in *Nansemond* County and *Chesapeake* City, except in that part of Dismal Swamp located as much as 100 yards from any railroad or public highway, and then only when the rifle is used on a stand elevated not less than 15 feet above the ground.

BOW AND ARROW is a legal weapon for all species, including migratory game birds, and may be used in regular seasons as well as the special archery season for deer, bear and squirrel. When hunting deer and bear, archers must use broad head arrows with blades at least ⅞ inch wide and bows capable of propelling any arrow in their possession 125 yards. Crossbows and poison arrows may not be used. Firearms may not be carried when hunting with bow and arrow.

PISTOLS are not legal hunting weapons and may not be used for killing wild birds or wild animals.

SPECIAL REGULATIONS

ON NATIONAL FORESTS AND COMMISSION-OWNED LANDS: Hunting with a dog or a gun or possession of any firearms which are not cased or dismantled or any bow which is not unstrung is prohibited in the National Forests or on Commission-owned lands West of the Blue Ridge and on Ward Rue Wildlife Management Area except during the authorized seasons below. These areas will be open for the hunting of all game and non-game species, the seasons for which coincide with the open dates below.

From October 15 through November 15 (Archery Season) strung bows only will be permitted on these lands (except Clinch Mountain and Hidden Valley Wildlife Management Areas). From November 18 through January 31 firearms (and dogs except during deer season) will be permitted on all the above lands for the regular hunting seasons except that Clinch Mountain and Hidden Valley Wildlife Management Areas will not be open to deer or bear hunting. Squirrel hunting with firearms is prohibited on all the above mentioned lands prior to November 18. In the event a spring gobbler season is established by the Commission of Game and Inland Fisheries, National Forest and Commission-owned lands will be open in those counties open for this type of hunting.

Hunting and possession of firearms is prohibited in Shenandoah National Park, Blue Ridge Parkway, Colonial National Historical Park and Prince William Forest Park by federal regulation.

Hog Island in Surry County and all of the waters of the James River within a radius of 1,000 yards around that island are closed to hunting and trapping except that deer, bear and squirrels may be hunted during the archery season.

The seasons on the Powhatan Wildlife Management Area will be the same as those authorized for Powhatan County.

POSSESSION AND DISCHARGE OF FIREARMS IN WATER AREAS

Shooting a rifle or pistol at wild birds and animals on or over the public inland waters of the state or carrying a loaded rifle or pistol on a boat or other floating device on the public inland waters for hunting wild birds and animals is prohibited.

eastern portion of the state was not opened until after the first peak deer hunting days had passed. In the western counties, where the deer hunting pressure and techniques do not produce the same side effect on turkey populations, the turkey season was cut on the other end. The 1963 spring season for gobblers only was expanded to provide additional turkey hunting without threat to the hens.

The one week advance in the small game season in the western part of the state, tried experimentally last year to give small game hunters a crack at the lesser species before the opening of the big game season, did not appeal to many of the landowners and hunters west of the Blue Ridge. It was discontinued this year. On the other hand, the extension of the quail season until February 15 in the eastern counties, where milder weather allows hunting to continue into the dead of winter, worked so well and met with such favor that this year the season is extended on grouse, rabbits and squirrels as well. The relatively high small game populations in the east allow hunters to enjoy the extra hunting days without endangering spring reproductive potential.

The Commission, striving to increase the quantity and quality of recreation offered by hunting, has expanded the archery season to a full 30 days beginning October 15 and extending through November 15. The number of deer taken by archers is quite small compared to the overall kill, and the high number of days' recreation enjoyed for each animal killed is one of the main advantages of bow and arrow hunting.

Virginia's hunting regulations, although they cumulatively cover an impressive number of pages, are not too complicated for the sportsman to absorb and obey if he seriously intends to do so. Hunting has its ground rules just as any other participation sport. All sports have their equipment specifications, their legal and illegal gear, and hunting is no exception. To the hunter the legal weapons and mechanical apparatus should seem quite simple when compared, for instance, to the requirements to be met by a "stock car" in racing competition.

Shotguns and shot may be used for all types of hunting. Slugs may be used over a large portion of the state, but in some counties they are prohibited by local regulations. Rifles are restricted as to calibre in many areas for safety reasons. Rifles may not be used to hunt migratory birds, but may be used on resident game except as prohibited by local regulations. Rifles must be at least .23 calibre for hunting deer and bear. Shotguns must not hold more than three shells. Archers must meet special equipment requirements when hunting deer or bear.

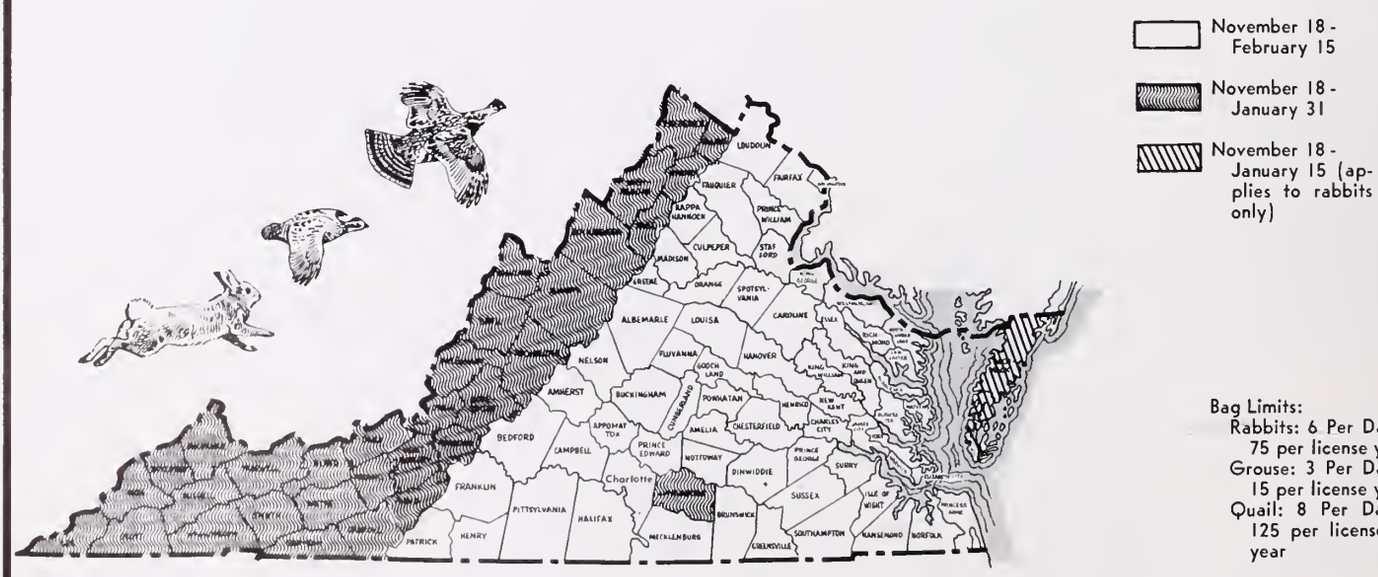
Just as no golfer would play a round of golf without first finding out par for the course, no hunter should venture forth without knowing the daily and seasonal bag limits for the species of game he is likely to encounter. Both bag limits and seasons often vary from one county to another, so it is wise to check regulations for the county or counties to be hunted quite thoroughly.

Hunting is limited to daylight hours (one-half hour before sunrise until one-half hour after sunset) except for some migratory game birds, turkeys during the spring gobbler season, and animals normally hunted at night which include foxes, opossums, mink, and racoons.

Permission is always required to hunt on private property, and certain stamps or permits are often required when hunting on state, federal or corporation owned lands. Hunting on these public areas is often limited to certain seasons, or portions of seasons, and different bag limits sometimes apply. A thorough check of the regulations will give these details for any area a hunter is considering.

The use of dogs is restricted or prohibited in certain areas for hunting deer and other species of game, and special restrictions or regulations apply on some public hunting lands.

1963-64 Rabbit, Quail and Grouse Seasons and Limits



The hunter not familiar with the Old Dominion's game laws must familiarize himself with the requirements of the snow law, the Sunday rest day, and other laws unique to Virginia.

Those who violate the game laws, and thousands do each year, fall into three distinct categories based primarily on their attitude rather than the nature of their offenses. The least common of these is the genuine wildlife "outlaw," a criminal is every sense of the word who intentionally violates the game laws. He is the most obnoxious to law-abiding sportsmen, and is often the hardest to catch because he plans his violations cunningly and carefully. He is usually well versed on the game laws and takes advantage of every loophole to avoid conviction.

The second type of violator is the "gambler" who can't resist the temptation to take a chance. He is the guy who neglects to buy a license ahead of time but hunts anyway "because this will be his only chance and he probably won't see a game warden today anyway." He is the one who "can't quit while he is winning" and keeps right on shooting after he gets his limit. He will also take a chance on shooting from a car, shooting game on posted property, or shooting game not in season because he can't pass up the opportunity. Although he often claims ignorance when caught in the act, he is usually much better acquainted with the law than he cares to admit.

The third type, and by far the most common, is the "careless" individual who just doesn't check the law carefully before going afield. He feels that "ignorance is bliss," and sincerely hopes that whatever game he comes across is "in season" when he shoots it and that he will not be "unlucky" enough to exceed a bag limit. We often wonder how far this ignorance of the rules would get him in a poker game.

The contention that Virginia's game laws are too complicated to be understood and obeyed is not borne out by the facts. Less than one percent of the state's approximately 300,000 hunters are arrested for law violations each year. This is pretty good testimony as to the honesty of Old Dominion sportsmen, and shows that those who make the effort *can* understand and comply with the law.

Copies of the complete summary digest of the 1963-1964 hunting laws and regulations are available from the Game Commission, and from game wardens and hunting and fishing license agents throughout the state.

REMEMBER

IN VIRGINIA, NO ONE IS ALLOWED TO

- **hunt or trap on another's land without the landowner's permission;**
- **hunt with firearms or other weapons on Sunday;**
- **hunt while under the influence of intoxicant or narcotic drug;**
- **cut den trees or carry an axe with handle over 20" long or saw while hunting, without landowner's permission;**
- **molest nest, eggs, den or young of any wild bird or animal except predatory or undesirable species;**
- **put out bait or salt or occupy baited blinds or places to take game birds or animals;**
- **hunt adjacent to forest fires;**
- **shoot any wild bird or animal from any vehicle;**
- **hunt quail in the snow;**
- **destroy, mutilate, or take down "posted" signs—hunting license may be revoked for one year upon conviction.**

1963-64 Bear Seasons and Limits

Bag Limits: One per license year (over 75 pounds live Weight)

WARDENS GO TO SCHOOL

By JIM McINTEER
Chief, Education Division

Commission photos by Kerrick

SCHOOL was "out" for most students early last June, but it was back to the classroom for about half of Virginia's game wardens when the Commission of Game and Inland Fisheries convened its annual in-service refresher training course for its field force at Camp Pendleton, the State's military reservation near Virginia Beach.

The course was conducted this year, as in the past, to keep the warden force up-to-date on current developments in their field, to provide refresher training, and to further the professional development of individual wardens. Those who did not attend school this year are scheduled for a similar course next summer.

Being a game warden today involves a great deal more than merely checking hunters and fishermen in the field and on the water to see that they comply with license, season, and bag limit regulations. Wardens must be schooled in the broad field of natural resource conservation, and in the specifics of game and fish management. They have a large public relations job to do, both as police officers and as local conservation agents. Their law enforcement work requires skill in investigation, and in the preparation and presentation of cases in court. The recent addition of boating safety laws and regulations to their responsibilities has added a whole new field in which competence is required.

On Monday morning, June 10, Major General Paul M. Booth, Adjutant General, Virginia National Guard, addressed the wardens and welcomed them to Camp Pendleton. Mr. E. W. Mundie of the Agricultural Extension Service, Virginia Polytechnic Institute, then lectured on land-use principles. Jim Mays of the Norfolk *Virginian Pilot* conducted a session on press relations. In the afternoon Bob Martin, Chief of the Fish Division, Biologist Jack Hoffman, and Engineer George Holladay instructed the class in the principles of fish management in Virginia.

On Tuesday Mr. F. D. Tymosko, Eastern Division Supervisor of the Virginia ABC Board, lectured on search and seizure, and Mr. John T. Hanna, Assistant Director of Safety for the City of Richmond, discussed police public relations. In the afternoon a class in courtroom procedure was conducted by Virginia Beach Circuit Court Judge Richard B. Kellam. Then the students had an opportunity to learn from each other's experiences, as some of the wardens took over the speakers' platform to review some selected legal cases from the Commission's own files and records.

Wardens were pleased with classroom and messing facilities at Camp Pendleton.

On Wednesday morning, after a lecture and demonstration on defensive tactics by Mr. W. O. Warren, Special Agent from Langley Air Force Base, the wardens were given a quiz, followed by a discussion, on game and fish laws. Although knowledge of game and fish laws are to a game warden what rules of the game are to a baseball umpire, nevertheless John McLaughlin, Chief of the Law Enforcement Division, and Stuart Purks, Assistant Chief, managed to include a few baffling situations and obscure interpretation in the quiz which provoked one of the most lively and enlightening discussions of the week. In the afternoon Dick Cross, Chief of the Game Division, and Biologists Shaffer, Gwynn, and Gilchrist covered the Commission's current game management activities and policies.

Thursday morning was devoted to a study of rules of evidence conducted by Sergeant Suthard of the Virginia State Police. In the afternoon Education Division Chief Jim McInteer, Education Officer Dorothy Allen, Information Officer Harry Gillam, and Safety Officer Jim Kerrick briefed the wardens on the nature and scope of the Commission's current education and information program.

Friday was boat day. Chief H. P. Smith of the Norfolk Navy Yard fire department gave a lecture and demonstration on first aid and water safety, and Mrs. Florence Wade, Boat Registration Supervisor, explained how registration, re-registration, and transfers of registration are handled and recorded by the Commission's boat section in Richmond. On Friday afternoon there was an orientation tour to the Commission's Back Bay area headquarters.

In-service personnel training is an important part of the Commission's effort to continue to improve the efficiency of its operations, and to adapt its organization to changing conditions and the expanding requirements of its mission. More emphasis has been placed on formal in-service training of wardens in recent years than ever before. New warden candidates are carefully screened and given competitive examinations before appointment, to insure the selection of trainees possessing the capability and aptitude for the work and for the further schooling which is required. After initial appointment the new trainees receive basic training and indoctrination before they are assigned to a work area. With these steps accomplished, further in-service training at regular intervals for all wardens keeps the organization sharp and competent.

There was ample time and opportunity for a bit of relaxation and play.

There were no casualties, but there were demonstrations in life saving and first aid.

The Virginia military reservation at Camp Pendleton has proved to be a near ideal site for wardens' school, although its well kept but deserted barracks, classrooms and mess halls are likely to provoke a strong feeling of nostalgia among those who recall the frenzy of excitement and activity that was typical of this and other such training camps during the war years. Camp Pendleton's proximity to the surf-stroked Atlantic shore and to the resort city of Virginia Beach provided plenty of opportunity for after-hours activities during the wardens' school. None of the men returning home seemed to have felt that it was a dull week, either in the classroom or outside it.

These wardens attended school at Camp Pendleton from June 10 to June 15:

L. Brandt, Albemarle
J. E. Allen, Amelia
C. D. Torrence, Appomattox
D. R. Miller, Bath
W. W. Shields, Bedford
P. P. Monaghan, Jr., Botetourt
R. A. Smith, Buchanan
C. C. Spencer, Buckingham
C. R. Chappell, Carroll
B. L. Adams, Charles City
J. R. Bellamy, Chesterfield
B. S. Denney, Clarke
F. T. Mabe, Craig
J. T. Newman, Cumberland
J. J. Gillespie, Scott
O. Kendrick, Dickenson
R. C. Hutchinson, Essex
G. F. Altman, Fauquier
J. W. West, Floyd
W. M. Haden, Fluvanna
J. D. Whittaker, Franklin
D. R. Ramsey, Frederick
W. T. Jamison, Giles
R. G. Mitchell, Giles
S. R. Stanford, Gloucester
R. E. Austin, Halifax
W. R. Redford, Jr., Hanover
A. R. Miller, Highland
C. T. Bland, King and Queen
W. F. Richards, Louisa
M. Johnson, Lunenburg
L. T. Harris, Mecklenburg
G. P. Simmons, Mecklenburg
W. S. Rountree, Nansemond
E. E. Walters, Chesapeake
J. W. Crumb, Northampton
J. W. Crickenburger, Orange
R. W. Inskeep, Page
T. J. Clement, Patrick
S. V. Pickrel, Pittsylvania
M. Morris, Jr., Powhatan
G. Foster, Prince George
W. L. Flory, Prince William
Otto Halstead, Virginia Beach
D. A. McLeod, Pulaski
R. A. Little, Richmond
E. R. Arrington, Rockbridge
R. E. Wilfong, Rockingham
J. H. Perry, Russell
F. C. Boggs, Spotsylvania
S. P. Doggett, Stafford
C. N. Hunter, Surry
J. C. Wilson, Tazewell
F. E. Settle, Westmoreland
J. S. Mise, Jr., Wise
E. G. Mitchell, York

PHEASANTS BEFORE BREAKFAST

By DOROTHY E. ALLEN
Education Officer

2:30 a.m.—CLANGGGGG! The alarm goes off in the middle of the night. Now I wonder if a hen pheasant is really crazy enough to scratch out from under cover and ruffle her feathers at a cock's *caw-ak?*

Well, this hen isn't crazy enough to get up and stick her nose in the personal affairs of *Phasianus colchicus.* So I turn off the alarm and snuggle back under the covers.

The music from the clock radio blares forth: "When the Red, Red Robin comes Bob. Bob Bobbin' Along." Oh, for a BB gun! That robin's got no right to be bobbin' along in the middle of the night. I tell myself: "You might as well get up. After all you said you *wanted* to go." It sure seemed like a much better idea at 2:30 p.m.

After downing two cups of coffee I am conscious enough to grope for dungarees and a sweat shirt. An elbow rests on the table supporting a drooping head while maxilla and mandible half-heartedly meet over a piece of toast. Even the taste buds are astonished and shocked receiving food in the middle of the night, and they rebel. I put aside the half eaten piece of manna (staff of life?) and reach for hot coffee.

Perhaps the car won't start: A pleasant thought! The mechanical contraption diabolically chuckles and turns to purring beautifully. The dampness of the chilly night penetrates the vehicle as I wait at a stop light. Broad Street reminds me of San Francisco in the book *On The Beach.* Guess no one else is fool enough to be stirring at this hour in the middle of the week. The whole of Broad Street is emptied of life, not even a police car on patrol. What an invitation to crime! Better check the car doors to make sure they're locked.

At last the open road, and what luck! There's life ahead—a truck to follow. That poor guy probably lives in reverse. Wonder if he has had his lunch break yet? At least his job hours are made a little easier by no traffic. He's slowing down for me to pass. There's no way I can let him know I like his blinking tail lights. There's plenty of time. No use hurrying. It's the pheasants who set the rendezvous appointment.

Providence Forge, and Sportsman Inn closed up tight! No coffee? No Tuttle? No life? It's so dark and deserted. Maybe he won't show and I can go back home and crawl in bed. But no, here comes a state car!

Apologies for being late consist of speeding over the curvy, washboard, country roads. A seat belt keeps me with him. Thank goodness the Inn wasn't open!

Supposedly beer cans, the calling cards of litter-bugs, blaze in reflection from the headlights. The reflectors dart about in the darkness and disappear beyond two miniature white tepees: deer getting the last few nibbles of tender shoots before their sunrise siesta.

Rabbits frightened by a mechanical sound but stunned by headlights dart here and there cutting jigsaw patterns in the road.

Relief! Our destination reached. For the first time since strapping the seat belt I felt free to divert "Barney Olfield's"

attention from flying low by asking him the facts of a pheasant's life.

Herm Tuttle, biologist in charge of Virginia Foreign Game Program, stated that in 1958, 300 Talischensis-Western Iranian cross (coloration of ringneck pheasant with an incomplete white collar) were released, and another release of 400 were made in 1959. The purpose of this census was to check on how they were holding up. Previous counts reveal they have prospered. It takes five years to form a definite opinion as to whether or not a game bird is adapting itself to an area. In this Sandy Point area of Charles City County they would not have spread out much, for they are hemmed in by the James River on one side, by the Chickahominy on another, and by woods on the other two sides.

In the area above Charles City he felt there had been good reproduction, but it was hard to tell for there they had spread out more.

The census method we were going to use had been initiated by a Missouri biologist. The check would consist of driving along the road, stopping every half mile, and recording all calls and sightings at three minute intervals. A population formula would be worked out from findings taken on three mornings.

At fifteen minutes before sunrise (5:15 a.m.) we started the census. Three times a twice repeated *caw-ak* was heard the first three minutes.

On to the next station. I noticed the sun was having as hard a time trying to peep out of the black curtained sky as were my pupils trying to squint through half closed lids.

The woods seemed to be full of bright red cardinals playing tag among the huge dogwood snowflakes.

A squirrel barked in defiance of our invading his domain. Out of curiosity I looked up and clicked back at him. Quizzically he questionmarked his tail and chattered cursing sounds. Sure enough, he was defending a white oak tree and not a species of the red oak family. The oak leaves looked like green butterflies just burst from their cocoon sheaths dancing in the breeze to rid themselves of their dampness.

On to the next station and Tuttle remarks, "The wind is coming up. If it gets too breezy we'll have to quit. The lack of wind is very important as audibility is greatly reduced by this element."

I recorded hearing on the average five times as many *bob-whites* as *caw-aks*. It was a great surprise to find out the *bob-white* I heard daily at home was a bit different. I realized I'd been vexed by a prevaricator. That malingerer mockingbird's *bob-white* had had a dicky-bird twang to it.

At the next station muddy footprints shaped likes babies' hands revealed a raccoon had probably washed his breakfast in the ribbon stream. Across the road a rabbit sprinkled itself with green confetti as it nibbled away at tender shoots.

At various sites along the route 8 to 10 pheasants had flushed at 45° angles and flown a short distance before disappearing in thick underbrush. This was before we saw the struttin' Don Juan. No doubt he had been around for some time staking out his territory. In all his glory the bedecked General advanced to the crowing podium in the ankle high wheat field. Having shaken the last speck of dust from his gaily colored uniform he puffed out his chest and cocked his bright red waddles with a Caesarian air. All nature was silent awaiting the heroic chanticleer. The feathered dictator spoke—a weak, two call *Caw-ak*. With a whir of his wings he convinced all he had *veni, vidi* and now was looking for females to *vici*. The male pheasant is a polygamous bird which means he will take more than one mate. However, in this area, the sex ratio is probably 1:1.

During the winter months he had been with the cocks raking in the ante chips of life's winter game. The female of his species had been "teaing" in the "League of Pheasant Habitat." Hearing his call she'll visit his crowing area but will also scout out the calls of other prospective home sites. Where she is most royally courted, she'll no doubt linger.

When the cock has established his harem, he will jealously guard the prized hens to make sure none step out and elope. Fighting off every *Phasianus*, pheasant or *colchicus* that comes along keeps him busy. After he has "heir-conditioned" his territory he wants no part of the domestic routine and will walk off looking for the company of other cocks.

Before separating the hens may cluck away at the fact that they are left holding the eggs, but cackle aloud in knowing understanding that, come one of these years, Don Juan will be a fall target. With their egg-laying mechanisms in high gear the hen party will break up, each going her own independent way to establish a nest near the cock's territory.

In the center of the wheat field the hen will build a nest on the ground in a slight depression and line it with grass and weeds. In fifteen days she will have laid twelve eggs and incubation confinement will begin.

In Virginia the farmer harvests his wheat in late June or July. In some states where a small grain crop is mowed earlier and a pheasant's nest is endangered, the hen sits so tight that she is often mutilated. If she does flush, her nest is destroyed. Nest mortality is as high as 50% in some states, and appears to be the most important single cause of mortality before hatching.

If a nest is destroyed and the hen survives, she probably will renest; 70 to 80% do. It has been found that when a hen renests she usually selects a heavily covered fence row. Two weeks later she will discover she has laid ten eggs. (Hardly ever as many as the first time.) At dawn she will arise, stretch, then seek out food, preferably wild seeds. Previous to laying her eggs she sought out calcium to aid in producing shells. Probably snails from a nearby stream helped make her babies' blankets. Having grained, gritted (quartz and granite) and watered she will return to her nest for an all day siesta until dusk when her internal alarm clock chimes dinner. Having seen the late, late, late star studded sky on a wide open screen she will turn in early. This routine she will carry out for 23 to 25 days. Fertility is 90% or better, so her life will become activited by nine times.*

The census is finished, and we are chilled by the cold dampness, so we head directly for hot coffee to help relieve the blister worn by a gnawing stomach rubbing the backbone.

At the "Sportsman Restaurant" bacon and eggs, a pint of coffee and pleasant conversation thaw out the chilled marrow. It is with anticipation that we look forward to the ultimate results of the *caw-aks*—a brood count in July. With a pleasant tiredness I prepare to battle sleep for the drive back to Richmond. It would please the Governor that I not become another statistic.

*I know; I anthropomorphized the pheasants. "It is dangerously easy to sentimentalize animals, to make the mistake of reading human thoughts and feelings into their actions.—But it is just as easy to err the other way, forgetting all creation is a brotherhood and that something of the same mind and heart dwells in all of us." Alan Devoe, *Animals in Love*, 1950

SPECIES MANAGEMENT: A Positive Approach

IF those worry-free hunters who like to blast away at any kind of ducks think "species management" is a new form of harassment, they are mistaken. Species management is not new, nor is it harassment. It may be a challenge to the responsible hunter, but not a burden to him.

Species management is a positive approach to better hunting. Practically all duck populations are down from the late 1950's, some dangerously low. Populations of some species have maintained themselves at a higher level than this. When the Fish and Wildlife Service announced last season's hunting regulations, complete protection was provided for some species of ducks that are in very short supply but a "bonus" of two scaup in the bag limit was added. *Species* protection was made commensurate with annual *species* supply.

As early as 1932, there were limitations on the total of canvasback, redhead, scaup, ringneck, teal, shoveller and gadwall ducks that could be included in the daily bag. Obviously, species management is not new to the American hunting scene.

Back in the late 1930's, drought in the prairie pothole breeding grounds reduced the population of canvasback and redhead ducks to a point where additional protection was needed. In 1936 and 1937, hunting of these birds and some other species was prohibited. Under this complete protection, canvasback and redhead populations bounced back to a point where such special restrictions were no longer needed. This was a case of successful application of species management.

If species management is to meet the pyramiding problems of the future as it has helped meet the problems of the past, the hunter must be able to identify the birds before he starts blasting away at them. This is not imposing a hardship on him. It is simply one of the obligations he accepts when he decides to go duck hunting. It is one of his contributions to his grandchildren. Or, putting it another way, it is his alternative to no duck hunting at all.

Most duck hunters would rather learn how to identify ducks than to face a closed season. Learning to identify ducks can bring the hunter a lot of added pleasure. Requiring positive identification before pulling the trigger allows the birds to come in close. This reduces crippling losses.

While restricting the harvesting of a species is the thing which directly affects the hunter, it is not the only kind of species management. Management of habitat or living conditions for a particular species seems to hold even greater possibilities for better hunting.

Most outdoorsmen probably have seen wooden or metal duck nesting boxes attached to posts or trees near watered areas. These are intended for wood ducks. In a natural environment, wood ducks nest in cavities in trees. Since man arrived on the scene, most of these natural nest sites have been cut down. One of the more popular conservation activities for Boy Scouts, sportsmen's groups, and conservation agencies has been to construct and place artificial nest boxes for wood ducks.

Drawdown of water levels is a method of managing a watered area for several kinds of ducks that have similar feeding habits. Most North American ducks can be classed as either diving ducks or puddle ducks. Diving ducks usually feed in deep water, diving as much as 30 feet or more for their food. The puddle or dabbling ducks feed in shallow water and merely "tip up" to glean their food from the bottom. Drawdowns allow marsh plants to grow down to the edge of the low water. Reflooding the area then makes these plants readily available as duck food. According to how fast the water level is raised and the depth of the lake when full, an area such as this can attract divers, dabblers, or both.

Not only species but geography enters into species management. This is the idea behind the flyway concept in which the North American continent is divided into four flyways with each one being managed under separate regulations.

Some aspects of species management are old, while others are as young as today's news. Just like magnum shotshells and outboard motors, species management is here to stay. Let's get on with it!

GIANT GOOSE NOT EXTINCT

THE world's largest wild goose, the giant Canada, which for over thirty years was thought to be extinct, has been rediscovered!

In his *Waterfowl of the World*, Jean Delacour says: "The Giant Canada Goose appears to be extinct." It was with considerable interest that wildlife biologists learned of a flock of several thousand Canada geese wintering at Rochester, Minnesota, containing individuals of very large size that appeared to belong to this supposedly extinct giant race.

The giant Canada goose, *Branta canadensis maxima*, is the largest of all the wild geese in the world, while the little cackling Canada goose, the pygmy race of the species, is the smallest. Although the giant Canada goose was well-known to hunters of a former generation, it was considered to be a myth by ornithologists until America's foremost student of geese, James Moffitt of California, was finally convinced of its existence. His untimely death in World War II prevented his publishing the facts, but Jean Delacour brought Moffitt's conclusion to the attention of the world when he formally described and named the giant Canada goose in 1951 after it was thought to be extinct.

About 200 of the big birds were trapped, examined and banded last winter. Although some of the geese in the flock were evidently of the well-known races common in the Mississippi Flyway, a sizeable proportion were exceptionally large birds, matching in dimensions as well as color characteristics the supposedly extinct giant race.

The flock roosted during the winter on Silver Lake, which is in a park within the limits of the City of Rochester, Minnesota. This lake is kept partly open by the discharge of warm water from a nearby electric plant. The geese ranged widely over the adjoining farmlands to feed. The breeding range of the giant Canada geese in this wintering flock is still unknown, but is probably somewhere in the northeastern part of their former known range in the Dakotas, western Minnesota, and Manitoba.

To Dr. Harold Hanson of the Illinois Natural History Survey goes the credit of discovering that *Branta canadensis maxima* not only is not extinct, but appears to have a sizeable population which is adapting itself nicely to man-made conditions. Dr. Hanson plans to publish his findings in the near future.

CHICKAHOMINY LAKE (Continued from page 9)

dance of grass shrimp, snails, minute worms, crickets, water bugs and spiders, and mosquitoes have disappeared. Anglers dress in foul weather gear and push into the flats, over the old sunken barges and piers that mark the end of a lumbering industry on the Chickahominy River, and along the areas where old boats have been scuttled, to fish minnows.

The winter fishing of minnows is much the same as plug fishing in slow motion. The minnow is hooked through the lips and tossed into the entanglements. They are reeled very slowly, that sluggish, hungry bass may be enticed to strike and have an opportunity to follow.

There is no crowding and no problem to find fish laden areas within the lake. There are six public accesses to the lake between Windsor Shades and Walkers on Route 60 east of Richmond. Most of them are in the Windsor Shades area where Walls, Dillon's Landing, Jeff's Place and Webbers Landing offer fine boats and baits and ice. Allen's Camp No. 1 and Powell's Landing are located at the dam at Walkers and both have launching ramps for private boats as well as boat rentals.

There are local names for the prime fishing spots. The best of them are pointed out in season by the boat livery operators. Directly across the lake from Allen's are two man-made fishing hot spots where Allen has weighted more than 30 discarded skiffs and sunk them off the point of Matahunk Neck and at the mouth of Matahunk swamp as fishing reefs. In the lake's mid-stream at the mouth of Johnson's Creek is the site of sunken barges which went under along with a loading pier in the days prior to the dam at Walker. Cypress Banks is easily spotted for its numerous cypress trees and a great fish hawk nest resting on the tallest of the trees.

Each angler picks a favorite spot for each season of the year. But one seems to be as productive as another. The Chickahominy Lake is that body of water where every angler may approach with confidence that fish are to be caught. It takes confidence, to set the mind's optimistic note, if fish are to be taken. Anglers here are to make each cast primed with expectancy—the slightest delay with a Peck's popper on a flyrod will let the smart bass hit and run.

But bass aren't as smart as bluegills. This has been shown at my old hollow cypress within a stone's throw of Allen's landing. I've only made two successful casts into the hole. Each provided a fish. The second one was with a flyrod and a whopping bluegill grabbed the bait as it rolled through the small hole and popped just inside the cove.

Unlike the bass, the bluegill figured the hole was the safest place in which to carry forth the battle. He dived and moved through an unseen hole somewhere in the depths of the tree and had to be worked gingerly before returning to the cavern. It was only after he turned belly-up that he could be worked through the narrow opening.

A hole like that isn't to be fished too often. It requires the right frame of mind—a confidence that a cast can be placed directly into the hole. A miss by as little as a quarter-of-an-inch and the hook is fouled in the cypress.

It's ideally located. One must pass close to the tree each time a better fishing hole is to be found. It is a fond reminder that a fish can always be found if an angler can get off an expert—or lucky—cast. There are a million such places to tease a challenge for the angler. Go find your own. I'm keeping mine in reserve until I get enough confidence to try one more cast . . . when Ed Allen isn't looking.

Secretary of Defense conservation award committee selects Fort Knox, Kentucky, as the military installation that conducted the most outstanding fish and wildlife conservation program in 1962. McChord Air Force Base, Washington, and Fort Huachuca, Arizona, were chosen runner-up installations. Committee members: Norman S. Paul, Assistant Secretary of Defense for Manpower, Chairman; Justice William O. Douglas, U. S. Supreme Court; Frank P. Briggs, Assistant Secretary of the Interior for Fish and Wildlife; Doctor Ira N. Gabrielson, President, Wildlife Management Institute; and Chester F. Phelps, Executive Director, Virginia Commission of Game and Inland Fisheries.

SECRETARY OF DEFENSE AWARDS CONSERVATION TROPHIES

THE Department of Defense, with control over 27 million acres of land in the United States, has, in addition to the main military mission, the responsibilities inherent in a land management agency. This includes the conservation and management of natural resources and the wise public use thereof compatible with the Defense mission and the Administration's policies.

The Secretary of Defense Conservation Award was established in 1962 to stimulate and give added incentive for improvement of the Defense fish and wildlife and conservation activities. It will be presented annually by the Secretary of Defense to the military installation that conducted the most outstanding program during the preceding year.

The award consists of two trophies, one of which remains in the Office of the Secretary of Defense and one for the permanent retention of the winning installation. Appropriate citations will also be awarded to the two runner-up installations as recognition for outstanding achievement in competition for the award.

The award selection committee chose Fort Knox, Kentucky, as the recipient of the first Secretary of Defense Award from the six final entries (two from each military department). Over 100 installations, representing all military services, were entered in the 1962 competition.

Quantico Virginia's Marine Corps Schools was one of the two final entries chosen to represent the Department of the Navy.

Executive Director Chester F. Phelps of the Virginia Commission of Game and Inland Fisheries was a member of the Secretary of Defense award committee making the final selections. Phelps has been asked to serve on the committee again in 1963.

Bird of the Month:

The Summer Tanager

By DR. J. J. MURRAY
Lexington, Virginia

THE summer tanager is often called "summer redbird" in the deep South since, in contrast with the cardinal, it spends only about five months of the year in the United States. It is one of our four species of birds in which the male is predominantly red. Though they are all red, the four are easy to distinguish. The scarlet tanager is a bright scarlet but has black wings and tail. The other three are rosy red. The cardinal is distinguished by its crest, its red bill, and its black face; the purple finch, badly misnamed for it is not purple at all, can be known by its small size and the fact that it is much duller in color toward the tail; while the summer tanager is rosy all over.

In all four of these birds the female is quite different from the male and much duller. The female tanager is olive-green on the back, suffused with orange, and yellowish-orange below. Oddly enough, while the red is much more striking in the male scarlet tanager than in the summer tanager, in the females the yellow is much richer in the summer tanager. Sometimes in the year-old males of both species there is a mixture of red and yellow.

The scarlet tanager, although much more a bird of the mountains, occurs in certain areas over most of the state. The summer tanager, on the other hand, is a bird of the lower country. It occurs at lower elevations in the Valley and in Southwest Virginia, but rarely above 1500 feet.

The summer tanager winters far south of us, from central Mexico to Peru. It reaches Virginia in middle or late April and generally leaves by the end of September.

The nest is usually some 15 or 20 feet from the ground, set near the end of a large branch and often where small upgrowing shoots help to support it. It prefers open oak woods, but is not limited to oaks. I have seen one nest that was 40 feet high in an elm, and another that was not set on a large branch at all but in a bunch of very small branches in the top of a tall shrub. The nest is shallow and rather thinly constructed. Three or four eggs, pale bluish and heavily marked, are laid.

The eggs hatch in something less than two weeks. The female seems to do all the incubating but the male is near at hand, to come at once if she gives an alarm. Nesting is from late May to June. In western Virginia nesting is not infrequently delayed into July. Indeed, it is not easy to give exact nesting dates for any species of birds. Not only is there a variation between pairs, but a pair must make another attempt after a first or even a second nest has been destroyed.

Both of our tanagers are good singers. The quality of the summer tanager's song is the sweeter of the two as the scarlet tanager's song has a burr with a touch of harshness. The call notes, by which one bird of a pair signals to the other, are quite different, the scarlet tanager saying *chick-turr,* while the summer tanager calls *chicky-tuck-tuck.*

Edited by HARRY GILLAM

National Forest Dedicated to Song Bird

A tract of the Huron National Forest in Michigan's Lower Peninsula was recently dedicated to the preservation and management of the half-ounce Kirtland's Warbler, now on the world list of endangered species. The management plans include a 60 year cycle of logging, controlled burning and regrowth to improve habitat for the estimated 1,000 warblers remaining.

The birds will only nest on the ground under stands of jack-pine between five and 15 feet high with low, live branches. Natural jack-pine reproduction depends upon fire to open the cones and release the seeds, hence the controlled burning program.

Adjoining state and federal lands will, when possible, be managed to help keep the Kirtland or jack-pine warbler from dwindling to extinction. This is the first instance in the U. S. where forest management is being centered around the perpetuation of a song bird.

Big Buck From Augusta

C. T. Schmidt of Keysville, Virginia, is shown with a 146 pound buck sporting massive 13 point antlers he bagged last year in Augusta County. He downed the deer on the first day and spent seven hours getting it back to camp unaided.

Virginia 22nd in Licensed Fishermen

Virginia ranked 22nd in the nation in the number of licensed fishermen during 1962, according to figures just released by the U. S. Fish and Wildlife Service. The Old Dominion ranked sixteenth in the number of resident license holders, and the receipts of $1,639,052 provided the ninth highest income from the sale of fishing licenses and permits.

On a national basis, over 19 million persons purchased one or more sport fishing licenses during 1962. The total cost of these licenses and permits was $54,163,163, nearly a $2 million jump from the 1961 figures. Including unlicensed fishermen, who fished in saltwater or other areas where licenses were not required or were otherwise exempt from buying licenses, the Bureau of Sport Fisheries and Wildlife estimates there are over 25 million sport fishermen 12 years or older in the United States.

Free Bulletin on Establishing Private Campgrounds

An attractive illustrated bulletin entitled "Opportunities for Private Campgrounds as an Alternative Use of Land" has recently been prepared by the Agricultural Extension Service, Virginia Polytechnic Institute, Blacksburg, Virginia. The booklet discusses the pros and cons of going into the campground business, including reliable estimates of the economics involved. Sections cover the wants of campers and the type of facilities which must be provided to make the business venture successful. The bulletin points out the need for this type of facility throughout most of the eastern United States. Advertising hints, construction hints and a list of pertinent bulletins are included. Copies of the booklet (circular 792) may be obtained free from the Agricultural Extension Service, V.P.I., Blacksburg, Virginia.

Commission Photographer Acclaims "Northerns" After Canadian Jaunt

Game Commission photographer Leon G. Kesteloo (right), with the assistance of Cree Indian Guide Pete Roberts, collects scale samples from northern pike during a two week fishing vacation at Parent Lake in Northern Quebec. Fishing companion and fellow member of the Virginia Angler's Club Board of Directors "Ryck" Ryckman (center), former member of the Missouri Conservation Commission Education Division staff, takes weights and measurements of the pike with the assistance of Quebec Game Warden "Mac" Bujold. Since northern pike were recently introduced into Virginia's Gaston Reservoir, the measurements will be used for growth rate comparison. Kesteloo highly recommended the pike fishing, reporting catches of up to 10 two and three pounders per hour on flyrod and home-made streamer flies along the shores of the wilderness lake at the northern limit of colonized territory. "Residents don't think much of the light tackle and considered the sporty technique 'way out'," Kesteloo said.

Virginian Wins IWL Award

Mrs. Clarence E. (Sarah) Hill of Arlington was given the Izaak Walton League's annual award for outstanding service in the field of conservation education at that group's annual convention in Cincinnati, Ohio. Mrs. Hill, chairman of the education committee of the Virginia Divison of the League, was cited for her work in furthering the Annual Wildlife Essay Contest sponsored jointly by the League and the Commission of Game and Inland Fisheries.

Edited by DOROTHY ALLEN

The Nature Trail Classroom

Located in the rolling hills of Fairfax County, our school ground and the immediate surrounding area not only lend themselves to the study of Nature and its place in our lives, but also richly contribute to our science program which is an integral part of our school curriculum. Learnings, based on the county guide developed by instructional personnel, form a continuous and sequential pattern from grades one through six in the study of living things and their interdependence as well as their dependence for existence upon the earth and its atmosphere. The earth's story and its role in the universe has real meaning for the children of Keene Mill Elementary School.

Photo by Hyndman

Signs of spring on the nature trail are pointed out to the Science Club by Alice Grizzard, teacher at Keene Mill Elementary School in Fairfax County, as the principal, Arthurea B. Rubinowitz, observes.

The trees in the wooded area of our grounds are mixed hardwood, dogwood, and some pine. There are also shrubs, wild flowers, ferns, and mosses which provide an ideal setting for our nature trail. Our students have had the advantage of being able to observe and study the plants in autumn as the leaves begin to turn and fall, while they are dormant during the winter, and as they begin to show signs of life in the warm days of early spring. They have kept records of their observations, increased research reading to find the answers to many questions, and discovered there were many problems to be solved along the way.

Our study was not confined to plants alone. Geology, the soil, birds, small animals, insects, and pond life came in for their share. The importance of caring for the soil and other natural resources is of great concern to our students. To solve our own erosion problem, with the help of the County School Board, the Virginia Division of Forestry, the Northern Virginia Soil Conservation District, and the Keene Mill P.T.A., we are filling the gullies and transplanting one thousand white pine seedlings.

Feeding stations that were hung among the trees for the wintering birds provided an opportunity for observation and the study of birds. Plans for next year include benches, bird baths, flagstone steps, flowers, and a natural habitat for a chipmunk and perhaps other small friendly animals. Volunteer parents have worked on Saturdays in helping with the gravel walks and transplanting.

One of the main objectives is to develop an appreciation of the beauty in nature and wildlife and what we can do to enhance, conserve, and protect them.

We feel that much has been accomplished this year; however, with continued effort and enthusiasm by pupils, faculty, and parents we look forward to a more rewarding 1963-64 school year.

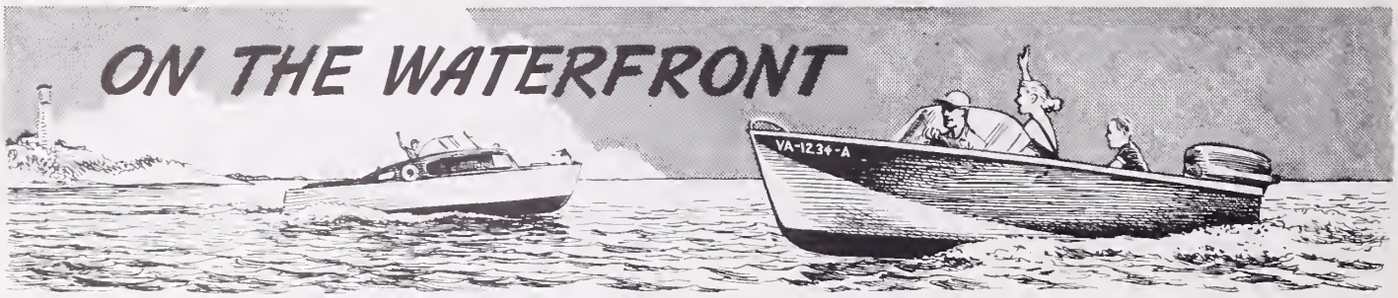
—*Alice E. Grizzard*
Springfield, Virginia

J. Robert Bond, President Richmond Chapter of Izaak Walton League of America, presents Jesse Douglas his prize winning essay award. Myra Lunn receives her award from Joe Bellamy, Chesterfield Game Warden. The winners were presented their awards at a special assembly for 250 students at Manchester High School.

Playing "Hooky" Doesn't Pay

Two 17-year-old boys skipped school and went fishing. Warden W. R. Redford, Hanover County, was checking fishing licenses when he met up with the youths at a county pond fished by the public. The boys did not have licenses and were later tried in Hanover Courthouse.

Judge J. L. Landram, of Hanover County Court, lectured the boys about skipping school and about their offense, then ordered them taken to Hanover jail, not for confinement, but for some appropriate "bare bottom" disciplining by their parents under supervision of the sheriff. The parents agreed. After the "spanking plank" was administered, the case was dismissed.



Edited by JIM KERRICK

Commission photo by Harrison
Game Warden J. J. Westbrook examines the safety equipment on board a boat on the James River.

Enforcement

During the period July 1, 1962, through May 31, 1963, Virginia game wardens inspected 25,698 pleasure boats in accordance with the Virginia Boating Safety Act, to promote safety for persons and property in connection with use, operation and equipment of vessels.

Boat owners with improper equipment, including *no approved* life saving devices, fire extinguishers and proper lights, head the conviction list with 467. Improper display of registration numbers, with 102 convictions, was second. This means that the registration number was improperly placed on the boat; not of a contrasting color; registration numbers painted on the boat upside down or letters and numbers not three inches in height. There were 61 miscellaneous convictions for such offenses as towing skiers without life saving devices, having life saving devices on board but not in serviceable condition, and operating after sunset without proper lights. Last but not least were 16 convictions for carelessness, recklessness and drunkenness on the part of the operator.

Interviews with game wardens who actively patrol Virginia waters revealed that the majority of pleasure boaters are aware of their responsibilities concerning their boat and the safety of those who are with them. On the other hand it was learned that in a great many cases the operator offered excuses such as, "I left it in the car or on the pier," or "I did not know that I was required to keep the registration card in the boat at all times while operating."

Many offered the excuse, when issued a citation for improper life saving devices, that they thought a ski belt was sufficient. A ski belt is *not* an approved life saving device.

One pleasure boater remarked to a warden that *he* did not *need* a life saving device because *he* could swim and that nothing was going to happen to *him*. Other boaters remarked that they thought the equipment they had was good for another year, or that they were going to get new equipment as soon as the stores opened.

The old excuse that it can't happen to me has been given over and over again, and heartbreaking tragedies continue to happen.

Common sense and caution *must* be exercised at all times on the water. And remember this. The game warden is on the water to help you and your family enjoy a day's outing, to assist you in case of emergency, and to curtail the actions of any "hot rod boater" who is endangering his own life and yours.

"Well, mates, does anyone here still feel old faithful can hold out another season?"

Commission photo by Harrison
Slow down: You are responsible for the damage caused by the wake from your boat.

Boatmen and Fishermen

For the boater who likes to fish, but does not like to clutter up his boat with a lot of trash, ice chests, etc., a new freeze-dried shrimp may be the answer to his problem.

This shrimp, packed in a double wall cellophane packet, keeps indefinitely without refrigeration. Wetting instantly restores the hook sized pieces of shrimp, from which 99.94% of the moisture has been removed, to their natural appearance, firmness, flavor and aroma. Left-over bait need not be thrown away, but may be kept until the next fishing trip without refrigeration.

Packets contain approximately 12-15 pieces of shrimp which can be kept in the tackle box or any small storage area. No additives or preservatives have been added. —*Canadian Boating*, April 1963

Fresh Fuel

Using fuel that has been stored in a tank over a period of several months will cause your motor to be hard starting and also will foul your fuel system.

Highly combustible vapors which are present in gasoline are lost when fuel is stored for a long period of time. Engineers recommend that only fresh fuel be used in your outboard motor.

EDITORIAL

UNTAXED INHERITANCE

(Continued from page 3)

swim, all snow-clad hills where one may coast, and all streams and ponds where one may fish, or where, when grim winter comes, one may skate, to hold the same for the period of their boyhood. And all meadows, with the clover blossoms and butterflies thereof; the woods with their appurtenances; the squirrels and the birds and echoes and strange noises, and all distant places which may be visited, together with the adventures there found. And I give to said boys each his own place at the fireside at night, with all pictures that may be seen in the burning wood, to enjoy without let or hindrance or without any incumbrance or care.

"Item: To lovers I devise their imaginary world, with whatever they may need, as the stars of the sky, the red roses by the wall, the bloom of the hawthorne, the sweet strains of music, and aught else they may desire to figure to each other the lastingness and beauty of their love.

"Item: To young men, jointly, I devise and bequeath all boisterous, inspiring sports of rivalry, and I give to them the disdain of weakness and undaunted confidence in their own strength. Though they are rude, I leave to them the power to make lasting friendships and of possessing companions, and to them exclusively I give all merry songs and grave choruses to bring lusty voices.

"Item: And to those no longer children or youths or lovers, I leave memory and bequeath to them the volumes of the poems of Burns and Shakespeare and of other poets, if there be others, to the end that they may live the old days over again, freely and fully, without tithe or diminution.

"Item: To our loved ones with snowy crowns I bequeath the happiness of old age, the love and gratitude of their children, until they fall asleep."—J. F. Mc.

LETTERS

(Continued from page 3)

Retired Yankee Comments

IT was rather a coincidence that I had noticed from the address sticker on my June copy of WILDLIFE that my subscription had expired and had placed it on my desk as a reminder to renew, when your notice came through the mail.

I first became acquainted with your excellent magazine through a subscription which was given me by my gas supplier. It certainly was an excellent way to introduce your publication.

I am a "damyankee," retired. I have wandered through the wilds of New York and New England at every opportunity during my life, so you can imagine your magazine is very welcome.

I spent my life concerned with the problems of youth and have yet to find juvenile delinquency in nature.

To save time, money and worry, I made the subscription for three years.

Stanley T. Hinman
Ditchley, Virginia

Mrs. Swisher (center, seated) with Mr. and Mrs. Paul Nuice, James Dawson, and Don Householder display 11 large black drum. C. E. Grady couldn't get in the photo. He was holding the camera.

Had Good Luck at Oyster

I AM enclosing a photo taken recently at Oyster, Virginia; we were there drum fishing and we go every year and with the same captain. I, for one, and many of my friends hunt and fish in Virginia. We have been fishing at Oyster for better than 10 years. Sometimes we have good luck, other times not so good, but we never have been *skunked.*

I, and also many of our friends, go on and on about VIRGINIA WILDLIFE being such a very nice magazine for all such sportsmen and having such beautiful covers.

I have a record of 16 deer kills here in Maryland and West Virginia. I have lots of relatives in Virginia. All of our kin-folk originated in Culpeper. I'm as proud of your state as you are.

I don't think there is a magazine that can compete with yours for fishing, boating rules, hunting and everything else . . . so little money for so much information!

Mrs. Frances M. Swisher
Cumberland, Maryland

Crappie Citations Unrealistic

IN the hope that you will give some attention to our complaint, I am enclosing a few clippings from our local newspapers which have stated our problem better than I could possibly do.

Have been fishing myself for about 30 years, and this year I caught the largest crappie (2½ pounds) that most of us here have ever seen. They usually average out around ½ to ¾ pounds in this section.

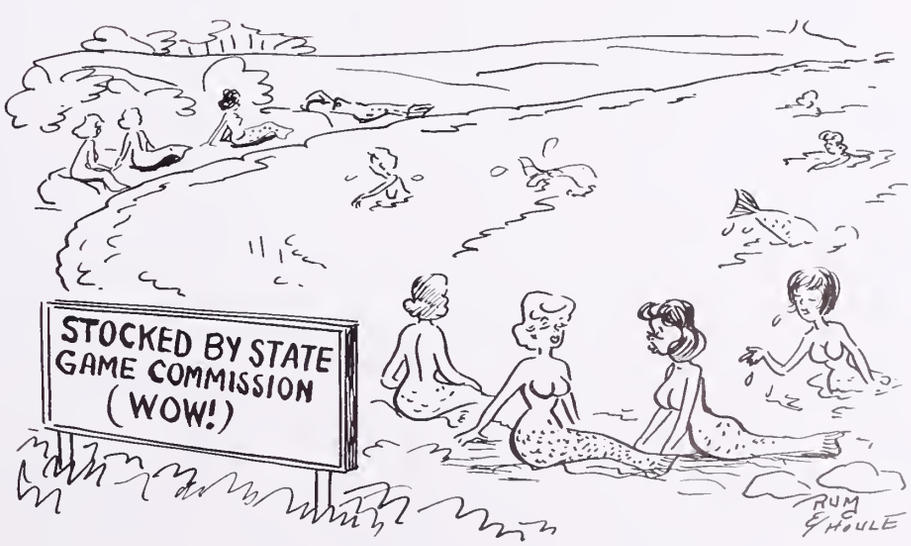
It is a shame that those of us who are ardent fishermen and desire very much to get a crappie citation have such a small chance to do so.

William G. Moseley
Virginia Beach, Virginia

In Virginia we are faced with an unusual size differential between the crappie found in large impoundments on the one hand and those taken from small ponds and natural waters on the other. We have issued two crappie citations this season, one for a three pound two ouncer caught in Kerr Reservoir and one for a three pounder from a private pond. If we lower the minimum to two pounds, as many fishermen have suggested, an angler fishing in one of the large reservoirs might catch several citation fish in a single day (which certainly would degrade the significance of citations generally), while other anglers who fish only in small ponds and natural waters still might be lucky to creel one citation crappie in a lifetime.

We realize that the minimum citation size established for crappie is unrealistic for certain waters, especially in view of the seven pound minimum for largemouth bass. While a bass of this size is certainly a trophy fish, it is not as uncommon as a three pound crappie.

It would be unfair to lower the minimum crappie size now, in mid-season, after many anglers have let fish under three pounds go unrecorded. We will give serious consideration to establishing a more equitable minimum crappie size next season. In the meantime, we invite other anglers' comments on the trophy fish citation program, not only with respect to crappie but regarding other species as well.—Ed.



ARE YOUR BOAT NUMBERS DISPLAYED CORRECTLY?

THERE MUST BE A HYPHEN OR EQUIVALENT SPACE BETWEEN THE 3 PARTS OF NUMBER

RIGHT

VA-1234-Z

VA 1234 Z

WRONG

VA1234Z

OF A COLOR CONTRASTING TO THE BACKGROUND

RIGHT

1 2 V A

WRONG

◎ 1 3

BLOCK CHARACTERS OF GOOD PROPORTION NOT LESS THAN 3 INCHES HIGH

RIGHT

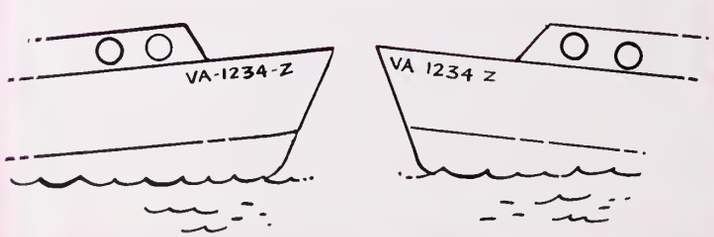
V A

WRONG

V A 1 2 a

PAINTED OR ATTACHED TO EACH SIDE OF BOW READING FROM LEFT TO RIGHT

RIGHT



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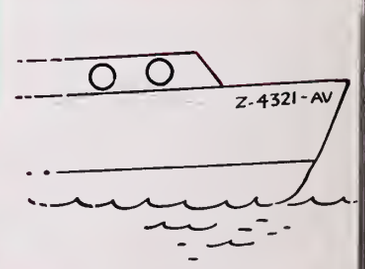

VIRGINIA COMMISSION OF GAME AND INLAND FISHERIES
RICHMOND, VIRGINIA